

RESOLUTION 2004-41

RESOLUTION OF THE MARINA CITY COUNCIL TO APPROVE THE SUPPLEMENT TO THE CERTIFIED FINAL ENVIRONMENTAL IMPACT REPORT ON THE MARINA HEIGHTS SPECIFIC PLAN/ABRAMS "B" HOUSING PROJECT

WHEREAS, on November 25, 2003, the City of Marina City Council certified the Final Environmental Impact Report (EIR) for the Marina Heights Specific Plan/Abrams "B" Housing Project (the "Project"), and

WHEREAS, the Marina Heights project involves demolition of 828 abandoned military housing units on a portion of the former Fort Ord historically referred to as Abrams Park and Upper Patton Park. These units would be replaced by 1,050 new residential units. In the adjacent Abrams "B" housing area, 194 existing residential units (192 units currently used as residences, 2 currently used for support purposes) would remain in place. An additional 12 existing transitional housing units operated by Interim, Inc. located between the Specific Plan area and the Abrams "B" area would also remain in place. The Marina Heights Specific Plan (the "Specific Plan") indicates that a 28-acre site (a portion of the landfill for the former Fort Ord) located adjacent to the Specific Plan area would be improved for use as an 18-acre public park, with the remaining 10 acres to be considered as a future school site. Implementation of the Specific Plan would result in the development of 5.85 acres of sub-neighborhood parks, creation of an 8.53-acre Oak Grove Preserve, development of a 12.92-acre greenbelt/linear park approximately 150 feet wide, and additional greenbelt linkages totaling approximately 8.33 acres, and

WHEREAS, the EIR evaluated the potential environmental effects associated with the implementation of the Specific Plan. It was intended to "identify the significant effects of the Project on the environment, identify alternatives to the Project, and to indicate the manner in which those significant effects can be mitigated or avoided." The EIR is meant to provide an objective, impartial source of information to be used by the lead agency (the City of Marina), as well as other agencies and the public, in their considerations regarding the adoption, rejection or modification of the Specific Plan as proposed, and

WHEREAS, since certification of the EIR, the Marina Coast Water District ("MCWD") issued a Water Supply Assessment and Written Verification of Supply for the Project ("WSA"). This WSA was adopted by the MCWD Board of Directors on December 15, 2003 pursuant to Government Code Section 10910 et. seq. and Government Code Section 66473.7 (b)(1). The WSA includes important information related to the MCWD's assessment of the Project's estimated demand for water, and the MCWD's ability to meet

anticipated future water demand within the Specific Plan area and elsewhere in Marina. The WSA intends to supplement the water supply analysis of the EIR, and

WHEREAS, City Planning Department staff, in coordination with the environmental consultant that prepared the EIR, Lamphier-Gregory, carefully reviewed the Water Supply Assessment and prepared a Supplement to the EIR pursuant to the California Environmental Quality Act ("CEQA") Guidelines Section 15163, and

WHEREAS, CEQA provides that a Supplement is a mechanism for incorporating new information in a certified EIR if only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation, and

WHEREAS, under CEQA Guidelines Section 15163(c), the Supplement to the EIR was circulated for a 45-day public review period, and responses to all comments received on the Supplement to the EIR during the public review period have been prepared City Planning Department staff, in coordination with the environmental consultant that prepared the EIR, Lamphier-Gregory, and reviewed by the Marina City Council.

NOW THEREFORE, THE CITY OF MARINA CITY COUNCIL DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. The City finds that:

- 1) Based on values used by MCWD in calculating estimated future water demand for the Water Supply Assessment, MCWD has determined that development of the Marina Heights Specific Plan area as proposed would require an estimated 349.5 acre-feet of water per year, and
- 2) For planning purposes, the Marina City Council has approved estimated water demand values that are less than those that were used by MCWD in developing the water demand estimates presented in the Water Supply Assessment prepared for the Marina Heights Specific Plan, and.
- 3) The Water Supply Assessment indicates that MCWD can presently provide 349.5 acre-feet of water per year to support development of the Marina Heights Specific Plan area as proposed, and
- 4) The Water Supply Assessment also indicates that, based on currently anticipated water demands and currently available water supplies, if MCWD were to provide 349.5 acre-feet of water per year to support development within the Marina Heights Specific Plan Area as proposed, then MCWD will not be able to provide water service to all of the currently anticipated development in the portion of the City of Marina on the former Fort Ord, and.
- 5) The maximum amount of water which the MCWD may presently serve to City of Marina uses on the former Fort Ord in compliance with its water resource agreements with the County and others relative to Fort Ord lands is 1,175 acre-feet per year, and

- 6) Through conditions of approval, the City of Marina can control the amount of water reserved to support future development within the portion of the former Fort Ord under its jurisdiction, so that the maximum amount of water which the MCWD may presently serve to City of Marina uses on the former Fort Ord (1,175 acre-feet per year) is not exceeded.

Section 2. Pursuant to Section 15163 of the CEQA Guidelines, the City finds that the information contained in the WSA and set forth in the Supplement make necessary some changes or additions to the EIR, but that none of the conditions described in Section 15162 of the CEQA Guidelines calling for the preparation of a subsequent EIR have occurred. Consequently, the Supplement is an appropriate method for documenting these changes.

Section 3. The WSA does not involve substantial changes in the Project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects.

Section 4. The WSA does not involve substantial changes with respect to the circumstances under which the Project is undertaken which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects.

Section 5. The WSA does not provide new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete.

Section 6. The Project will not have one or more significant environmental effects not discussed in the previous EIR.

Section 7. Significant environmental effects previously examined will not be substantially more severe than shown in the previous EIR.

Section 8. The WSA does not show that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant environmental effects of the Project.

Section 9. The WSA does not show that mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment.

BE IT FURTHER RESOLVED, that the Marina City Council hereby approves the Supplement to the EIR in “**EXHIBIT A – SUPPLEMENT TO THE EIR MARINA HEIGHTS SPECIFIC PLAN/ABRAMS “B” HOUSING PROJECT**”.

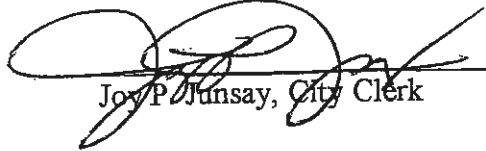
PASSED, APPROVED, AND ADOPTED by the Marina City Council at their adjourned meeting on March 3, 2004, by the following vote:

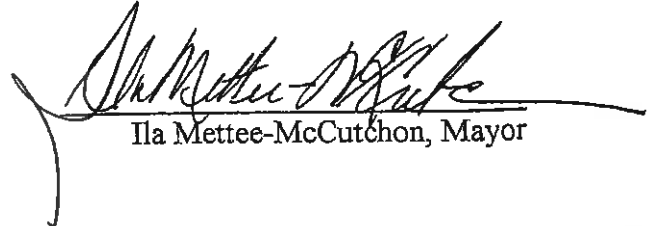
AYES, COUNCIL MEMBERS: Gray, Morrison, McCall, Mayor Mettee-McCutcheon

NOES, COUNCIL MEMBERS: Delgado

ABSENT, COUNCIL MEMBERS: None

ATTEST:


Joy P. Junsay, City Clerk


Ila Mettee-McCutcheon, Mayor

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SUPPLEMENT TO THE
ENVIRONMENTAL IMPACT REPORT
RESPONSE TO COMMENTS

**MARINA HEIGHTS SPECIFIC PLAN/
ABRAMS “B” HOUSING PROJECT**
City of Marina

SCH No. 2003021012

Prepared for
City of Marina
Planning Department

by

Lamphier-Gregory
1944 Embarcadero
Oakland, CA 94606

February 2004

PREFACE

PURPOSE OF THE SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT

The purpose of the SUPPLEMENT TO THE EIR is to present new information related to the provision of water for the development proposed within the Marina Heights Specific Plan area that has become available since certification of the Marina Heights Specific Plan/Abrams "B" Project EIR in November, 2003. The inclusion of the information provided in the Water Supply Assessment submitted to the City of Marina by the Marina Coast Water District in December 2003 was presented in its entirety within the SUPPLEMENT TO THE EIR in compliance with CEQA Section 15083.5 (City or County Consultation with Water Agencies).

In accordance with the requirements of the California Environmental Quality Act (CEQA), this RESPONSE TO SEIR COMMENTS document presents the responses to comments received during the public review period on the SUPPLEMENT TO THE EIR. This document includes copies of all written comments received within the 45-day public review period following publication of the SUPPLEMENT TO THE EIR, and verbal comments received at a public hearing held during the review period, and provides responses to those comments. As required by CEQA, this document addresses those comments received during the public review period that relate directly to the adequacy and completeness of the SUPPLEMENT TO THE EIR. This document does not address those comments received that relate to characteristics or features of the proposed Project where the EIR's analysis of Project-related environmental issues are not directly involved.

The EIR (which is comprised of the Draft EIR, the Final EIR, the SUPPLEMENT TO THE EIR and this RESPONSE TO SEIR COMMENTS document) is intended to be certified as a complete and thorough record of the environmental impacts of the proposed Project by the City of Marina. Certification of the EIR as adequate and complete must take place prior to any formal City action on the proposed Project itself, and EIR certification does not equate to approval of the Project.

The EIR has been prepared pursuant to the California Environmental Quality Act (CEQA) as amended (commencing with Section 21000 of the California Public Resources Code), and the CEQA Guidelines. The Lead Agency for the Project, as defined by CEQA, is the City of Marina.

The EIR is meant to provide an objective, impartial source of information to be used by the lead and responsible agencies, as well as the public, in their considerations regarding the Project. The basic purposes of CEQA are to:

- inform governmental decision-makers and the public about the environmental effects of proposed activities;
- involve the public in the decision-making process;
- identify ways that damage to the environment can be avoided or significantly reduced; and
- prevent environmental damage by requiring changes in the project through the use of alternatives or mitigation measures.¹

The analysis in the EIR concentrates on those aspects of the Project that are likely to have a significant adverse effect on the environment, and the EIR identifies reasonable and feasible measures to mitigate (i.e., reduce or avoid) these effects. The CEQA Guidelines define "significant effect on the environment" as "a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project"² The determination of significance of potential environmental effects is based, in part, on the discussion of environmental effects which are normally considered to be significant found in Appendix G of the CEQA Guidelines.

1 State of California, Governor's Office of Planning and Research, *California Environmental Quality Act Statutes and Guidelines*, 1995, Section 15002(a).

2 Ibid, Section 15382.

COMMENTS AND RESPONSES

This section contains comments, both written and verbal, on the SUPPLEMENT TO THE EIR on the Marina Heights Specific Plan/Abrams "B" Housing Project. Letters received during the 45-day public review period are listed first. These letters are followed by the summaries of comments made at the City Council's public hearing on the SUPPLEMENT TO THE EIR. Each letter and the summary of comments made at the public hearing are marked to identify distinct comments on the SUPPLEMENT TO THE EIR. Responses to these comments are provided following each letter and the comments from the public hearing.

Throughout the responses to comments, where a specific comment has been addressed previously, a reference to the response in which the comment is discussed may be provided in order to reduce repetition.

In reviewing the comments received on the SUPPLEMENT TO THE EIR, it should be noted that while some of the material submitted provides opinion on the proposed Project or addresses features and characteristics of the Project as currently proposed, such material may not address the environmental analysis presented in the SUPPLEMENT TO THE EIR. Responses presented in this document relate, as required under CEQA, to the environmental effects of the Project as discussed in the SUPPLEMENT TO THE EIR. While other comments that are not directly related to the environmental effects of the Project may be acknowledged, it is beyond the scope of the RESPONSE TO COMMENTS document to provide responses to these comments or opinions.

Several additional points to keep in mind in reviewing the comments received on the SUPPLEMENT TO THE EIR are presented in Section 15204 of the CEQA Guidelines which states that a Lead Agency need not "conduct every test or perform all research, study, and experimentation recommended or demanded by commentors", in Section 15003 (h) which states that "CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document.", and in Section 15003 (j), which states: "CEQA requires that decisions be informed and balanced. It must not be subverted into an

instrument for the oppression and delay of social, economic, or recreational development or advancement”.

The letters received on the SUPPLEMENT TO THE EIR are listed below, followed by the summary of the verbal comments received at the City Council meeting of January 20, 2004. Each letter has been marked to identify each specific comment in the right-hand margin (i.e., A-1, B-2, etc.). Following each letter, the response to each identified comment in that letter is presented sequentially (for example, the first comment on the SUPPLEMENT TO THE EIR identified in LETTER C is identified as C-1 in the right-hand margin of the letter, and the corresponding response immediately following LETTER C is coded as RESPONSE C-1). In order to avoid repetition, where individual comments focus on the same issues raised in a previous comment or comments, the response to those comments may make reference to a previous response or responses.

LIST OF LETTERS

- A. B. Hunter Harvath, AICP, Planning Manager, Monterey-Salinas Transit, January 15, 2004.
 - B. Nicolas Papadakis, Executive Director, Association of Monterey Bay Area Governments, January 20, 2004.
 - C. Robert D. “Dan” O’Brien, January 20, 2004.
 - D. Douglas Fay, January 25, 2004.
 - E. Gudrun Beck, Conservation Co-Chair, Sierra Club Ventana Chapter, February 7, 2004.
 - F. Simon Whitmey, Project Director, Marina Community Partners, February 9, 2004.
 - G. Paula F. Pelot, February 3, 2004.
 - H. Terry Roberts, Director, State Clearinghouse, February 9, 2004.
- Summary of Comments from Public Hearing, January 20, 2004.

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MONTEREY-SALINAS TRANSIT

PLANNING DEPARTMENT

JOINT POWERS AGENCY MEMBERS:

*City of Carmel-by-the-Sea • City of Del Rey Oaks • City of Marina • City of Monterey • City of Pacific Grove
City of Salinas • City of Seaside • County of Monterey*

January 15, 2004

LETTER A

Mr. Haywood Norton
Planning Department
City of Marina
211 Hillcrest Ave.
Marina, CA 93933

**RE: Marina Heights/Abrams "B" Project
EIR Supplement Comments**

Dear Mr. Norton:

Thank you for the opportunity to comment on the Supplement to the Environmental Impact Report for the Marina Heights/Abrams "B" Housing project. In addition to the comments submitted during the Draft EIR period, please note the following concerns.

On December 10, 2003, MST representatives met with City of Marina staff as well as the Marina Community Partners consultants who are developing the University Villages mixed-use project on the former Fort Ord. From these initial discussions regarding the University Villages project, it appears that Marina Community Partners is committed to designing and building a transit-friendly development. In particular, they have proposed to include an intermodal station, a transit corridor, as well as mixed residential, commercial and office uses, among other features, that will enable MST to efficiently and effectively serve the development.

A-1

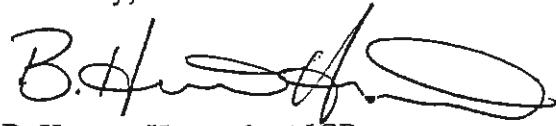
The lower-density Marina Heights development, however, will be more difficult to serve by bus. Because it lacks commercial uses, virtually all trips will have to be made by automobile. No permanent jobs, shopping convenience, or mixed-use features are included in the plans for Marina Heights. The resulting traffic congestion may cause increased delays on our bus lines. These non-transit friendly aspects of the development will potentially produce increased operating costs for MST. While we recognize that the Supplement to the EIR addresses the water needs of this project and not those of other Fort Ord projects, it is troubling that the increased water allocation for Marina Heights may jeopardize a more transit-friendly development such as University Villages.

Letter to H. Norton
January 15, 2004
Page 2 of 2

We are encouraged by the willingness of Marina Community Partners to work with MST as they continue with their planning efforts. In that regard, we would recommend that the City of Marina consider carefully the long-term impacts to University Villages and other Fort Ord redevelopment projects if an increased water allotment is granted for the less transit-friendly Marina Heights project.

If you have any questions regarding this matter, please contact me at 393-8129.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Hunter Harvath". The signature is fluid and cursive, with a large loop at the end.

B. Hunter Harvath, AICP
Planning Manager

CC: MST Board of Directors
W. Reichmuth, *TAMC*
M. Houlemard, *FORA*

Letter A: B. Hunter Harvath, Monterey-Salinas Transit, 1/15/04

Comment A-1: On December 10, 2003, MST representatives met with City of Marina staff as well as the Marina Community Partners consultants who are developing the University Villages mixed-use project on the former Fort Ord. From these initial discussions regarding the University Villages project, it appears that Marina Community partners is committed to designing and building a transit-friendly development. In particular, they have proposed commercial and office uses, among other features, that will enable MST to efficiently and effectively serve the development.

The lower-density Marina Heights development, however, will be more difficult to serve by bus. Because it lacks commercial uses, virtually all trips will have to be made by automobile. No permanent jobs, shopping convenience, or mixed-use features are included in the plans for Marina Heights. The resulting traffic congestion may cause increased delays on our bus lines. These non-transit-friendly aspects of the development will potentially produce increased operating costs for MST. While we recognize that the Supplement to the EIR addresses the water needs of the project and not those of other Fort Ord projects, it is troubling that the increased water allocation for Marina Heights may jeopardize a more transit-friendly development such as University Villages.

We are encouraged by the willingness of Marina Community Partners to work with MST as they continue with their planning efforts. In this regard, we would recommend that the City of Marina consider carefully the long-term impacts to University Villages and other Fort Ord redevelopment projects if an increased water allotment is granted for the less transit-friendly Marina Heights project.

RESPONSE A-1: Statement of concern regarding the possible effects that supplying water to fully serve the proposed development of the Marina Heights Specific Plan area might have on future development within the University Villages area is noted.

AMBAG

ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

LETTER B

January 20, 2004

CITY OF MARINA

JAN 23 2004

PLANNING

Mr. Haywood Norton
City of Marina
211 Hillcrest Avenue
Marina, CA 93933

**Re: MCH # 010411 - Notice of Preparation of Availability of a Supplement to
Environmental Impact Report and Notice of Public
Hearing for Marina Heights Project/Abrams "B" Housing
Project**

Dear Mr. Norton:

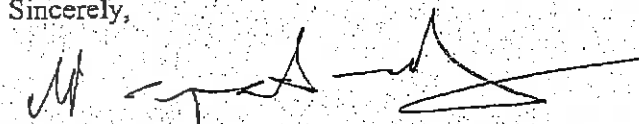
AMBAG's Regional Clearinghouse circulated a summary of notice of your environmental document to our member agencies and interested parties for review and comment.

B-1

The AMBAG Board of Directors considered the project on January 14, 2004 and has no comments at this time.

Thank you for complying with the Clearinghouse process.

Sincerely,



Nicolas Papadakis
Executive Director

Letter B: Nicolas Papadakis, Association of Monterey Bay Area Governments, 1/20/04

Comment B-1: AMBAG's Regional Clearinghouse circulated a summary of notice of your environmental document to member agencies and interested parties for review and comment.

The AMBAG Board of Directors considered the project on January 14, 2004 and has no comments at this time.

RESPONSE B-1: Comment noted.

Robert D. "Dan" O'Brien
171 Aaron Way
Marina CA 93933
831-384-8966
dan@fastisfun.com

To City of Marina City Council

Council meeting January 20, 2004

Re: Supplement to the Environmental Impact Report (EIR) for the Marina Heights Project/Abrams "B" Housing Project

The Supplement to the EIR does not reflect some very pertinent information.

1. Recent information released by the Army at its Community Involvement Workshop January 13, 2004 indicates that the flow of the toxic TCE groundwater plume is naturally flowing toward the three Fort Ord wells that will be supplying the 1175 Acre/feet of water projected. As pumping increases to supply the needs of the subdivision it is reasonable to expect the TCE traces found at well 29 presently to increase in volume, and begin to show up in the other two wells 30 and 31. C-1
2. The Army is in the process of treating both the TCE and Carbon Tetrachloride toxic ground water plumes that underlie the former Ft Ord lands. There are many wells other than those supplying water to the Marina Coast Water District in the area that are being used in the water cleanup program. It is my understanding that the agreement between the Army and the Marina Coast Water District is that the Marina Coast Water District do nothing to interfere with the Army's cleanup efforts. If there is any interference the cleanup responsibility would become the responsibility of the party that causes the interference. This needs to be clearly understood. For this reason the agreement between the Army and the Marina Coast Water district should be included in the Water Supply Assessment and Written Verification of Supply as required by Government Code section 66473.7 (d) (1) "Written contract or other proof of valid rights to the identified water supply that identify the terms and conditions under which the water will be available to serve the proposed subdivision". If pumping from the aquifer should divert water being treated, the Army may claim the Water District is interfering with their efforts, and the whole cleanup problem could become that of the Marina Coast Water District or the City of Marina. C-2
3. The City is considering the purchase of liability insurance to cover the potential of lawsuits resulting from the uncertainties of environmental consequences that are now known or may be discovered in the future. Of major concern should be the C-3

potential for diseases resulting from building over a known toxic water plume and planning to use water that is already showing signs of containing toxic chemicals. These concerns are real and legitimate. Are the inhabitants of the proposed subdivision going to pay for this insurance, will development funds be specifically set aside for this purpose, or will this be assessed to all the residents of Marina equally in the form of higher water rates or taxes? This should be taken into consideration now as it is a legitimate cost of using the selected source of water.

Thank you very much for your consideration and addressing my concerns.

Robert D. "Dan" O'Brien

Letter C: Robert D. "Dan" O'Brien, 1/20/04

Comment C-1: Recent information released by the Army at its Community Involvement Workshop January 13, 2004 indicates that the flow of the toxic TCE groundwater plume is naturally flowing toward the three Fort Ord wells that will be supplying the 1175 Acre/feet of water projected. As pumping increases to supply the needs of the subdivision it is reasonable to expect the TCE traces found at well 29 presently to increase in volume, and begin to show up in the other wells 30 and 31.

RESPONSE C-1: Comment noted. As indicated on page 16 of the SUPPLEMENT TO THE EIR, both the DEIR and the Water Supply Assessment, prepared by Byron Buck & Associates and adopted by the Marina Coast Water District on December 15, 2003 (WSA) identified trichloroethylene (TCE) as a contaminant affecting one of the three water supply wells on the former Fort Ord. The WSA explains that the present level of this contaminant are well within the mandated state and federal health standards, and goes on to explain the methods used by MCWD to dilute water coming from the affected well prior to distribution such that there will not be a significant environmental impact related to the Project. As these dilution methods currently provide a feasible way of addressing the TCE contamination of the one well that is currently affected, similar methods could be employed successfully if and when additional wells may ultimately become contaminated with detectable levels of TCE in the future.

Comment C-2: The Army is in the process of treating both the TCE and Carbon Tetrachloride toxic ground water plumes that underline former Ft Ord lands. There are many wells other than those supplying water to the Marina Coast Water District in the area that are being used in the water cleanup program. It is my understanding that the agreement between the Army and the Marina Coast Water District is that the Marina Coast Water District do nothing to interfere with the Army's cleanup efforts. If there is any interference the cleanup responsibility would become the responsibility of the party that causes the interference. This needs to be clearly understood. For this reason the agreement between the Army and the Marina Coast Water District should be included in the Water Supply Assessment and written Verification of Supply as required by Government Code section 66473.7 (d)(1) "Written contract or proof of valid rights to the identified water supply that identify the terms and conditions under which the water will be available to serve the proposed subdivision". If pumping from the aquifer should divert water being treated, the Army may claim the Water District is interfering with their efforts, and the whole cleanup problem could become that of the Marina Coast Water District or the City of Marina.

RESPONSE C-2: Comment noted. The "written contract or proof of valid water supply ..." is shown in the Water Supply Assessment, and the MCWD has confirmed that there is sufficient water to supply the Project. It is not expected, and there is no evidence, that either the City of Marina or the MCWD would interfere with the U.S. Army's clean-up efforts.

Comment C-3: The City is considering the purchase of liability insurance to cover the potential of lawsuits resulting from the uncertainties of environmental consequences that are not known or may be disclosed in the future. Of major concern should be the potential for diseases resulting from building over a known toxic water plume and planning to use water that is already showing signs of containing toxic chemicals. These concerns are real and legitimate. Are the inhabitants of the proposed subdivision going to pay for this insurance, will development funds be specifically set aside for this purpose, or will this be assessed to all residents of Marina equally in the form of higher water rates or taxes? This should be taken into consideration now as it is a legitimate cost of using the selected source of water.

RESPONSE C-3: Comment noted. The Environmental Impact Report does not address issues that do not relate to physical changes in the environment, including questions related to potential financial liability and the purchase/cost of insurance. Issues related to health impacts associated with groundwater contamination in the vicinity of the Project site and clean-up efforts are addressed on pages 7-15 through 7-21 of the Draft EIR.

John Courtney

From: "Jeffery P. Dack" <JDack@ci.marina.ca.us>
To: "Haywood Norton" <hnorton@ci.marina.ca.us>; <jcourtney@lamphier-gregory.com>
Cc: <sransom@allenmatkins.com>; <crichadmar@aol.com>; <orcagr@aol.com>;
 <casafina@aol.com>; <michaelshaw@redshift.com>
Sent: Monday, January 26, 2004 10:00 AM
Subject: FW: Marina Heights WSA and EIR Comments for the Record

-----Original Message-----

From: DouglasPaulFay@aol.com [mailto:DouglasPaulFay@aol.com]
Sent: Sunday, January 25, 2004 11:00 AM
To: jdack@ci.marina.ca.us; bdelgado@mbay.net
Subject: Marina Heights WSA and EIR Comments for the Record

Marina City Council and interested parties,

I'm a fourth generation Monterey County resident that has been deeply involved with land use policies and planning. I've contributed a substantial amount of time to both the City of Salinas and County of Monterey General Plans, several FORA hearings, water issues meetings including, MCWRA, MPWMD, water law, desalination, and MBNMS Sanctuary Advisory Council meetings, and many other meetings and hearings throughout Monterey County. I was appointed by the Monterey County Planning Commission to sit on the Greater Salinas General Plan Update Committee.

My concern and thoughts on the Marina Heights, University Village, and the future of the City of Marina are as follows.

It's my understanding that the WSA concludes that you do not have sufficient water resources for Marina Heights and other planned future uses such as the University Villages. The alternatives for the needed increased water resource availability are:

- 1) Conservation - Given the fact that you have a water deficiency, an updated Water Management Plan is needed and will be essential when addressing the cumulative impacts in the planning process.
- 2) Aquifer storage and recovery (ASR) - ASR can provide a reliable source of water. The available amount and the cost to provide that source will depend on where the source comes from. Desalination of ocean water injected and recovered will cost more than a natural source of fresh water such as from the Salinas River.
- 3) Recycled waste water (RWW) - A RWW plan is needed to work with conservation. Treated sewage water (purple pipe) can be used for landscape, greenbelt, golfcourse, carwash, and other non potable uses. Excess can also be sold or traded with other agencies such as the MCWRA for a potable source of drinking water. A perfect example of a development that is failing from a water conservation and planning standpoint is the Las Palmas subdivision on River Road. This approximately 1,000 home subdivision has an independent sewage treatment plant and storage reservoir which processes the wastewater which is then used for irrigation on the sight. The homes consume more water than can be used for irrigation purposes. The lawns are saturated. Recently they installed 1,000s of feet of purple sprinkler pipe on the grazing lands adjacent to the subdivision to burn off the excessive wastewater.

This was an oversight of the developer and planning staff and should not be repeated again anywhere.

- 4) Desalination - Although the cost of desalinating ocean water has decreased slightly in recent years, it is still cost prohibitive and 4 times the cost of desalinating fresh water. Marrying desalination to the Moss Landing powerplant is an alternative water source that will be extremely expensive to the City of Marina ratepayers. Desalination of ocean water will also have an increased negative impact on the Monterey Bay marine ecosystem. Any and all viable alternatives must be considered under CEQA.
- 5) The Salinas River - The Salinas River is the most viable alternative as a component to meet your water needs. This alternative is also the most politically controversial. The Salinas Valley Water Project (SVWP) allocates no water to FORA over and above the historical use as written, and will not benefit the City of Marina. A regional approach to meet our water needs is needed. The Marina Coast Water District (MCWD) should consider how it can obtain water from the Salinas River system. A collaborative effort by the MCWD and MCWRA is a must.

Without an adequate and affordable source of water, and a full and complete comprehensive plan on the cost and secure payment of this water source, the 248 acres of public property in the hands of the City of Marina

D-1

D-2

should not be sold to a developer until such an understanding is met and has the approval of the residents of the City of Marina. The land will be developed and homes will be built. That is a given. You also have a fiscal responsibility and community needs that must be met prior to sale of the property. If more money is need to cover the cost if infrastructure for the overall development plans of the City of Marina, this should be recognized and considered before any and all sales of land. Lands for housing subdivisions in Monterey County are selling for \$150,000 an acre to the developers. This should give you a good ball park indication as to what the City of Marina should be asking in order to get fair market value for the land.

Cumulative economic responsibility also includes affordable housing needs, economic growth, educational and business opportunities.

D-3

Affordable housing - Affordable housing is profitable and achievable without subsidizing at the 40% level. This is not only a fact, it is what the citizens of Marina want. Approving and building the needed affordable housing will benefit economic growth, jobs creation, educational and business opportunities. These opportunities can be greatly and significantly increased across the board if renewable, solar efficient technology is applied to all home and commercial construction in the City of Marina. The major bonuses of integrating solar water heating and electricity generation are:

- 1) It will be provided at the lowest cost when designed into a new building and produced in numbers.
- 2) It provides local jobs including drivers, sales, service, maintenance, technology, advertising, etc.
- 3) It provides local educational opportunities in the areas of trades and technology.
- 4) It will provide lower utility bills for all especially low income families in the future affordable housing units.
- 5) It will lessen our dependence on big power plants, giving residents a greater sense of community knowing that their elected officials are really doing all they can to improve the quality of life for all in the City of Marina.

Please submit my comments in this email to the Marina City Council and notify me as to when the next hearing or town hall meeting will be held on this important issue.

Respectfully,

Douglas Fay
1000 Pajaro St. Suite C
Salinas, CA 93901
(831) 422-0846
douglaspaufay@aol.com

Letter D: Douglas Fay, 1/25/04

Comment D-1: It's my understanding that the WSA concludes that you do not have sufficient water resources for Marina Heights and other planned future uses such as University Villages. The alternatives for the needed increased water resource availability are:

- 1) Conservation – Given the fact that you have a water deficiency, an updated Water Management Plan is needed and will be essential when addressing the cumulative impacts in the planning process.*
- 2) Aquifer storage and recovery (ASR) – ASR can provide a reliable source of water. The available amount and cost to provide that source will depend on where the source comes from. Desalination of ocean water injected and recovered will cost more than a natural source of fresh water such as from the Salinas River.*
- 3) Recycled waste water (RWW) – A RWW plan is needed to work with conservation. Treated sewage water (purple pipe) can be used for landscape, greenbelt, golfcourse, carwash, and other non potable uses. Excess can also be sold or traded with other agencies such as the MCWRA for a potable source of drinking water. A perfect example of a development that is failing from a water conservation and planning standpoint is the Las Palmas subdivision on River Road. This approximately 1,000 home subdivision has an independent sewage treatment plant and storage reservoir which processes the wastewater which is then used for irrigation on the site. The homes consume more water than can be used for irrigation purposes. The lawns are saturated. Recently they installed 1,000s of feet of purple sprinkler pipe on the grazing lands adjacent to the subdivision to burn off the excessive wastewater. This was an oversight of the developer and planning staff and should not be repeated again anywhere.*
- 4) Desalination – Although the cost of desalinating ocean water has decreased slightly in recent years, it is still cost prohibitive and 4 times the cost of desalinating fresh water. Marrying desalination to the Moss landing powerplant is an alternative water source that will be extremely expensive to the City of Marina ratepayers. Desalination of ocean water will also have an increased negative impact on the Monterey Bay marine ecosystem. Any and all viable alternatives must be considered under CEQA.*
- 5) The Salinas River – The Salinas River is the most viable alternative as a component to meet your water needs. This alternative is also the most politically controversial. The Salinas Valley Water Project (SVWP) allocates no water to FORA over and above the historical use as written, and will not benefit the City of Marina. A regional approach to meet our water needs is needed. The Marina Coast Water District (MCWD) should consider how it can obtain water from the Salinas River system. A collaborative effort by the MCWD and MCWRA is a must.*

RESPONSE D-1: Comment, opinions and recommendations noted. As indicated on page 15 of the SUPPLEMENT TO THE EIR, both the DEIR and the WSA point out that if adequate water to meet the anticipated water demand associated with the development of the Marina Heights Specific Plan area as proposed is provided from the existing supply of

water allocated for future development within the Marina portion of the former Fort Ord, then there would not be sufficient water remaining in the existing allocation to support the level of development within the Marina portion of the former Fort Ord currently anticipated under the City of Marina's General Plan.

Recommendation to have MCWD update the current Urban Water Management Plan is noted.

Opinion regarding the benefits of aquifer storage and recovery is noted.

Recommendation to have MCWD develop a recycled wastewater plan (RWW Plan) as a way to avoid potential problems similar to those identified at the Las Palmas development is noted.

Opinion regarding the infeasibility of desalination as a means of expanding the local water supply is noted.

Opinion regarding the importance of the Salinas River as a future source of local water supply is noted. Recommendation that MCWD and MCWRA collaborate to develop a regional approach to meeting water needs through the use of the Salinas River system is noted.

Comment D-2: Without an adequate and affordable source of water, and a full and complete comprehensive plan on the cost and secure payment of this water source, the 248-acres of public property in the hands of the City of Marina should not be sold to a developer until such an understanding is met and has the approval of the residents of the City of Marina. The land will be developed and homes will be built. That is a given. You also have a fiscal responsibility and community needs that must be met prior to sale of the property. If more money is needed to cover the cost of infrastructure for the overall development plans of the City of Marina, this should be recognized and considered before any and all sales of land. Lands for housing subdivisions in Monterey County are selling for \$150,000 an acre to developers. This should give you a good ball park indication as to what the City of Marina should be asking in order to get fair market value for the land.

RESPONSE D-2: Opinion regarding the need to delay the sale of the portion of the former Fort Ord that is proposed to support development within the Marina Heights Specific Plan area until additional evaluation of the availability and cost of water to support such development has been completed and approval of Marina residents for such a sale has been obtained is noted. The Environmental Impact Report does not address issues beyond those associated with changes in the physical environment, including the price of the land to be developed within the proposed Marina Heights Specific Plan area.

Comment D-3: Cumulative economic responsibility also includes affordable housing needs, economic growth, educational and business opportunities.

Affordable housing – Affordable housing is profitable and achievable without subsidizing at the 40% level. This is not only a fact, it is what the citizens of Marina want. Approving and building the needed affordable housing will benefit economic growth, jobs creation, educational and business opportunities. These opportunities can be greatly and significantly increased across the board if renewable, solar efficient technology is applied to all home and commercial construction in the City of Marina. The major bonuses of integrating solar water heating and electricity generation are:

- 1) It will be provided at the lowest cost when designed into a new building and produced in numbers.*
- 2) It provides local jobs including drivers, sales, service, maintenance, technology, advertising, etc.*
- 3) It provides local educational opportunities in the areas of trade and technology.*
- 4) It will provide lower utility bills for all especially low income families in the future affordable housing units.*
- 5) It will lessen our dependence on big power plants, giving residents a greater sense of community knowing that their elected officials are really doing all they can to improve the quality of life for all in the City of Marina.*

RESPONSE D-3: Opinions regarding cumulative economic responsibility, the need for (and feasibility of) developing affordable housing, and the benefits of increased use of solar-efficient technology are noted.

SIERRA CLUB



VENTANA CHAPTER

P.O. Box 5667 Carmel, California 93921 408 • 624 • 8032

cc: Council + city mgr.

LETTER E

February 7, 2004

By FAX 384-9148

To: Marina City Council

Re: Water Supply Assessment for Marina Heights Project

Honorable Mayor and City Councilmembers:

The Sierra Club Ventana Chapter commented on the Marina Heights project on July 30, 2003 and October 8, 2003. We have these further comments regarding the Water Supply Assessment for Marina Heights.

The City of Marina has a water allotment of 1,175 AFY for its Ord Community projects. The WSA states that Marina Heights water demand will be 349.5 AFY. The total water demand for the anticipated development on Ord lands in the City of Marina is 1703.7 AFY (Table 3-3, WSA), a shortfall of some 628 AFY for Marina's development plans for its former Fort Ord property.

E-1

It would appear that the Marina City Council will have to prioritize the planned Ord Community developments in order to comply with the FORA allocated water supply. A preferred procedure would be for the Council to take a pro-active stance. Rather than react to developers' proposals for this city-owned land, the Council should promote income producing and community enhancing projects that are within the parameters of the FORA water allotment.

Thank you for your consideration.

Gudrun Beck
Gudrun Beck, Conservation Co-Chair
23765 Spectacular Bid Lane
Monterey, CA 93940

GB/GT



Letter E: Gudrun Beck, Sierra Club (2/7/04)

Comment E-1: The City of Marina has a water allotment of 1,175 AFY for its Ord Community projects. The WSA states that Marina Heights water demand will be 349.5 AFY. The total water demand for the anticipated development of Ord lands in the City of Marina is 1703.7 AFY (Table 3-3, WSA), a shortfall of some 628 AFY for Marina's development plans for its former Fort Ord property.

It would appear that the Marina City Council will have to prioritize the planned Ord Community developments in order to comply with the FORA allocated water supply. A preferred procedure would be for the Council to take a pro-active stance. Rather than react to developer's proposals for this city-owned land, the Council should promote income producing and community enhancing projects that are within the parameters of the FORA water allotment.

RESPONSE E-1: Observations and recommendations noted.

Marina Community Partners
100 12th. Street, Bldg. 2902, Suite 107
Marina, CA 93933

February 9, 2004

Mr. Hayward Norton
Senior Planner
City of Marina
211 Hillcrest Ave.
Marina, CA 93933

Re: Marina Heights/Abrams "B" SEIR (SCH # 200302102)

Dear Mr. Norton:

Thank you for the opportunity to review and comment on the EIR supplement ("SEIR") described above. On behalf of Marina Community Partners LLC ("MCP"), I would like to make the following observations.

As you know, the purpose of the SEIR was to address information contained in the *Water Supply Assessment and Written Verification of Water Supply* adopted by the MCWD Board of Directors on December 15, 2003 (the "WSA"). Because the WSA is required by applicable law (Government Code Sections 10910 *et seq.* and 77473.7(b)(1) *et seq.*) to address both District-wide supplies and District-wide demands on a cumulative and long-term basis, it necessarily has implications for all projects to be served by MCWD throughout the City of Marina, including University Villages. The same thing can be said about the City of Marina's CEQA obligations under the *Stanislaus Natural Heritage* (i.e., Diablo Grande) decision and related cases.

F-1

In its consideration and environmental review of MCP's applications for land use approvals, the City will no doubt rely in part upon MCWD's analyses (as set forth in the WSA and reflected in the SEIR) to address issues related to water supply. As an applicant, we therefore have a keen interest in ensuring that the City of Marina's limited water supply is allocated appropriately and is based upon all current legal and technical considerations.

As we have expressed previously (*see* my prior memoranda of November 18, 2003 and November 25, 2003 addressed to the Mayor, City Council, City Manager and City Attorney), "MCP has some concern that ...absent further resolution of the broader water supply issues facing the City of Marina and MCWD..." the City's commitment of approximately 350 AFY of water to the development described in the SEIR (the "Proposed Project") could well result in a shortfall for University Villages. As stated in the SEIR, the provision of water service to the Proposed Project:

Hayward Norton
February 9, 2004
Page Two

"could preclude future development in other portions of the former Fort Ord that has also been anticipated under the Marina General Plan, since a reduced supply of water would be left to support such development under the existing allocation that would otherwise receive a larger portion of the existing water allocation . . . [T]he reallocation of anticipated water supply within the former Fort Ord area to provide adequate water to support the proposed development of the Specific Plan area could require modifications to the General Plan if it were to result in reductions in the anticipated level of future development elsewhere within that area."

The SEIR goes on to conclude that the few conservation-oriented mitigation measures proposed in the SEIR would not be sufficient to address this problem.

We do not oppose the Proposed Project *per se*. We do, however, have serious questions and reservations about approval that does not ensure the participation of *all affected parties* in the development of a cooperative and comprehensive solution to the broader water supply issues facing the City and MCWD in light of the constraints imposed by state law and the various agreements governing this situation. Additionally, we recognize that as the MCWD continues to develop their anticipated Water Conservation Feasibility Study, additional water conservation measures may become required that would modify the availability of water to the development projects in the City.

We are optimistic that such a solution can be developed, and we are fully prepared to work vigorously with the City Council, City Staff and others to do just that.

Respectfully submitted,

Simon Whitney
Project Director

cc: Mr. Michael Armstrong (MCWD)
Ms. Joy Junsay – City Clerk, City of Marina

Letter F: Simon Whitmey, Marina Community Partners, 2/9/04

Comment F-1: As you know, the purpose of the SEIR was to address information contained in the Water Supply Assessment and Written Verification of Water Supply adopted by the MCWD Board of Directors on December 15, 2003 (the "WSA"). Because the WSA is required by applicable law (Government Code Sections 10910 et seq. and 77473(b)(1) et seq.), to address both District-wide supplies and District-wide demands on a cumulative and long-term basis, it necessarily has implications for all projects to be served by MCWD throughout the City of Marina, including University Villages. The same thing can be said about the City of Marina's CEQA obligations under the Stanislaus Natural Heritage (i.e., Diablo Grande) decision and related cases.

In its consideration and environmental review of MCP's applications for land use approvals, the City will no doubt rely in part upon MCWD's analyses (as set forth in the WSA, and reflected in the SEIR) to address issues related to water supply. As an applicant, we therefore have a keen interest in ensuring that the City of Marina's limited water supply is allocated appropriately and is based upon all current legal and technical considerations.

As we have expressed previously (see my prior memoranda on November 18, 2003 and November 25, 2003 addressed to the Mayor, City Council, City Manager and City Attorney). MCP has some concern that ... absent further resolution of the broader water supply issues facing the City of Marina and MCWD ..." the City's commitment of approximately 350 AFY of water to the development described in the SEIR (the "Proposed Project") could well result in a shortfall for University Villages. As stated in the SEIR, the provision of water service to the Proposed Project:

"could preclude future development in other portions of the former Fort Ord that has also been anticipated under the Marina General Plan, since a reduced supply of water would be left to support such development under the existing allocation that would otherwise receive a larger portion of the existing water allocation. ... [T]he reallocation of anticipated water supply within the former Fort Ord area to provide water to support the proposed development of the Specific Plan area could require modifications to the General Plan if it were to result in reductions in the anticipated level of future development elsewhere within that area."

The SEIR goes on to conclude that the few conservation-oriented mitigation measures proposed in the SEIR would not be sufficient to address this problem.

We do not oppose the Proposed Project per se. We do, however, have serious questions and reservations about approval that does not ensure the participation of all affected parties in the development of a cooperative and comprehensive solution to the broader water supply issues facing the City and MCWD in light of the constraints imposed by state law and the various agreements governing this situation. Additionally, we recognize that as the MCWD continues to develop their anticipated Water Conservation Feasibility Study, additional water conservation measures may become required that would modify the availability of water to the development projects in the City.

We are optimistic that such a solution can be developed, and we are fully prepared to work vigorously with the City Council, City Staff and others to do just that.

RESPONSE F-1: Comment noted. The *Water Supply Assessment and Verification of Water Supply* (WSA) prepared by MCWD to evaluate the water demand and supply issues associated with the proposed development of the Marina Heights Specific Plan area may provide information of value when an application for the University Villages project is submitted and, thereafter, brought forward for environmental review. However, MCWD will still be required to prepare a separate WSA document to evaluate water demand and supply issues associated with the University Villages project as part of that project's environmental review. Such an evaluation could be expected to reflect any changes in MCWD water supply planning that occur between the MCWD adoption of the Marina Heights Specific Plan WSA (December 2003) and the adoption of the MCWD WSA on the University Villages project at some point in the future.

As indicated in this comment, the SUPPLEMENT TO THE EIR states that both the DEIR and the WSA point out that if adequate water to meet the anticipated water demand associated with the development of the Marina Heights Specific Plan area as proposed is provided from the existing supply of water allocated for future development within the Marina portion of the former Fort Ord, then there may not be sufficient water remaining in the existing allocation to support the level of development within the Marina portion of the former Fort Ord currently anticipated under the City of Marina's General Plan. However, as indicated on page 15 of the SUPPLEMENT TO THE EIR, under the significance criteria presented on page 10-6 of the DEIR, implementation of the Specific Plan would have a significant environmental impact if it were to require new or expanded entitlements to water supply resources, or if it were to require the construction of new water treatment facilities (or the expansion of existing water treatment facilities) that could result in significant environmental effects. As MCWD has indicated that it has sufficient production capacity to meet the needs of the Marina Heights project, supplying the water to support the proposed development of the Specific Plan area does not represent a significant environmental impact, and no mitigation measures are necessary. The measures identified in the DEIR (and repeated in the SUPPLEMENT TO THE EIR) to conserve water within the Specific Plan area would be expected to result in some reduction in Specific Plan-related demand for water from the MCWD. As indicated in this comment, the DEIR states (and the SUPPLEMENT TO THE EIR repeats): "However, implementation of these measures would fall significantly short of offsetting the water supply deficit estimated to occur if the Specific Plan is implemented unless the City elects to shift the anticipated distribution of the current water allocation as anticipated in the Marina General Plan and as further discussed above in (DEIR) Section 2, Land Use."

Statement of concern regarding the need to develop a cooperative and comprehensive solution to the broader water supply issues with the participation of all affected parties, and opinion regarding the possibility of achieving such a solution, are noted.

Haywood Norton, Senior Planner
 City of Marina
 211 Hillcrest Ave.
 Marina, CA 93933

February 09, 2004 *VIA EMAIL AND FAX*

Dear Mr. Norton,

As you know, recently enacted state law requires that a Water Supply Assessment and Written Verification of Supply (WSA) on the Marina Heights project must be made part of the EIR. The City is required to do a detailed analysis of the information contained in the WSA, and the public comments thereon, as part of the CEQA review process to determine whether projected water supplies are adequate to meet the project's anticipated demand and that of future planned projects. G-1

Although I previously made verbal comments to the Council on the WSA, I am submitting the following comments and cautions via this missive, on the Water Supply Assessment and Written Verification of Supply for the Marina Heights Specific Plan:

▪ Section 1.4 "Relationship of This Document to the Marina Coast Water District Urban Water Management Plan" G-2

Paragraph two states, "*As provided for in the law, this report incorporates by reference and relies upon the planning assumptions and projections of the Plan in assessing the water demand of the proposed project relative to the overall increase in demands expected by the District.*" It is my understanding that, although the Urban Water Management Plan (UWMP) is required to be updated only every five years, for the purposes of the fulfilling the SB221 requirement, it is prudent to have a plan that is no more than two years old. The current UWMP was completed and published on 12/05/2001 and is more than two years old.

That notwithstanding, the 2001 UWMP was prepared under the Public Resources Code that existed at that time, a code that was significantly revised as a result of SB 221 and SB 610. Moreover the planning assumptions and projections used in the UWMP do not appear to reflect the current Marina Heights project specific plan and therefore the WSA's reliance upon the 2001 UWMP may be unwarranted. In addition, it is cause for concern that the WSA "*incorporates by reference and relies upon*" the UWMP but the UWMP was not circulated with the WSA so that the public could evaluate the UWMP's planning assumptions and projections

▪ Section 2.0 "Project Water Demands" G-3

Table 2-1 does not provide sufficient data for evaluation of its conclusions. For instance, what was the square footage of the "comparable" homes in each category of the "Land Use" column? The table shows lot square footage but does not address the square footage of the homes and how many plumbing fixtures are included in the comparison homes. What existing townhouses were used to determine the actual water use factors? In Preston and Abrams Parks, both townhouse developments on the former Fort Ord, there is a substantial variance between each park's per unit water usage. Were either, or both, of these developments used to determine the water use factors? Were they "averaged" or were other

developments used to determine the water use factors? There should be more detail provided before the projected demands factors are accepted in the City's analysis.

▪ Section 3.1 "Overall Supplies"

G-4

The analysis of the ability to deliver water must be based on an evaluation of actual supply in dry, average and wet years. Although conservation, proposed recycled water programs and desalination plans are worthy of consideration in the analysis and should increase the available AF/Yr, we must be cautious about accepting plans, or "paper water," in lieu of actual available "wet" water.

▪ Section 3.2 "Groundwater Supplies"

G-5

The WSA speaks to the contamination of the Fort Ord wells by TCE, a degreaser and solvent, but does not address the presence in the 180 ft aquifer of carbon tetrachloride, a solvent used in the 1940's and 1950's. Both of these agents have a number of plumes in the 180 ft aquifer that, per current mapping done as part of the Fort Ord Base cleanup efforts, appears to be "draining" toward a hole in the aquitard, posing a potential threat to nearby Fort Ord wells.

The WSA points to the advancing seawater intrusion and states that the demands of this project will *"proportionally increase the rate of seawater intrusion and the need for the District to protect its supply from this intrusion."* Overdrafting increases the advance of seawater and threatens the recharging of the 900 ft aquifer that supplies Central Marina. The WSA does not provide a detailed plan of just how the supply will be protected from the overdrafting and the resultant seawater intrusion.

▪ Section 3.4 "Marina Heights Demands vs. FORA Allocations and City of Marina Development Plans"

G-6

The WSA states, *"Based on currently anticipated water demands and currently available supplies, the District will not be able to provide water service to all the currently anticipated development in the portion of the City of Marina on the former Fort Ord."* Table 3-3 (page 18) concludes that the total demand of all the currently anticipated projects will be 1703.7 AF/Yr, substantially less than the current FORA allocation of 1175 AF/Yr.

University Villages, a mixed use project, will be the "engine that drives" this economic development conveyance of former Fort Ord lands and the City should not risk jeopardizing the University Villages project's water supply by over-committing AF/Yr to the Marina Heights project.

▪ Section 3.6 "Groundwater Legal Entitlement"

G-7

I caution the City to not rely upon "paper water" in an assessment of sufficient water supply.

▪ Section 6.0 "Water Supply Sufficiency"

G-8

This section again raises a cautionary flag regarding seawater intrusion. In its analysis of the water supply sufficiency, the City should take into account the quality of the water, not just the quantity. Obviously, this is difficult to quantify but it should be factored into the analysis.

On page seven, the WSA expresses the District's commitment "*to monitor and develop better information on the rate of seawater intrusion.*" It goes on to state, "*Provided this monitoring is continued and planning and investment proceeds to develop new supplies ahead of any potential loss of existing groundwater wells, a reliable supply can be maintained for the Marina Heights development as well as the District as a whole.*" The City should regard this as a "provisional" statement, not a guarantee.

■ 10.0 "Summary Water Supply Sufficiency Determination"

G-9

The conclusion reached in this section, "*the District has determined that its water supplies are currently sufficient to meet the projected water demands associated with the proposed project, in addition to other planned demands ...*" is inconsistent with its statement (as noted above) in Section 3.4.

In conclusion, I urge the City to do a thorough analysis of the availability of water to serve this and the other planned former Fort Ord developments by testing the planning assumptions and demand projections of the WSA, in addition to encouraging thorough public discussion and analysis.

G-10

Thank you for considering my comments in this process and for your commitment to, and hard work for, the City of Marina.

Respectfully,

Paula F. Pelot
728 Landrum Court
Marina, CA 93933

Letter G: Paula F. Pelot, 2/9/04

Comment G-1: As you know, recently enacted state law requires that a Water Supply Assessment and Written verification of Supply (WSA) on the Marina Heights project must be made part of the EIR. The City is required to do a detailed analysis of the information contained in the WSA, and the public comments thereon, as part of the CEQA review process to determine whether projected water supplies are adequate to meet the project's anticipated demand and that of future planned projects.

RESPONSE G-1: Comment noted. In presenting the WSA in its entirety as part of the SUPPLEMENT TO THE EIR, the City of Marina has provided the public with the Marina Coast Water District's evaluation of the water demand and supply issues associated with the proposed development of the Marina Heights Specific Plan area, consistent with the requirements of current state law. All public comments received on the SUPPLEMENT TO THE EIR during the 45-day public review period are responded to in this document. As indicated on page 15 of the SUPPLEMENT TO THE EIR, page 21 of the WSA states: "The District's current groundwater wells have sufficient production capacity to meet the needs of the Marina Heights project." With respect to "future planned projects", the SUPPLEMENT TO THE EIR provides the following statement on page 15:

"The WSA also confirms the EIR's evaluation of the effects of providing water to support development within the Specific Plan area beyond the level anticipated in the Marina General Plan. Where the DEIR indicates that: "If adequate water to meet the demands of the Marina Heights development is provided from the existing water allocation, ... then this could preclude future development in other portions of the former Fort Ord that has also been anticipated under the Marina General Plan, since a reduced supply of water would be left to support such development under the existing allocation that would otherwise receive a larger portion of the existing water allocation.", the WSA indicates that given the estimated demand for water at the Specific Plan area following development, coupled with the existing water use in the Preston Park and Abrams housing development areas and water to support existing commercial and institutional uses within the City of Marina's jurisdiction within the former Fort Ord, the MCWD would not be able to provide water service to all currently anticipated development in the portion of the City of Marina on the former Fort Ord (WSA page 16)."

Comment G-2: Section 1.4 "Relationship of This Document to the Marina Coast Water District Urban Water Management Plan" paragraph two states, "As provided for in the law, this report incorporates by reference and relies upon the planning assumptions and projections of the Plan in assessing the water demand of the proposed project relative to the overall increase in demands expected by the District." It is my understanding that, although the Urban Water Management Plan (UWMP) is required to be updated only every five years, for the purposes of fulfilling the SB221 requirement, it is prudent to have a plan that is no

more than two years old. The current UWMP was completed and published on 12/05/2001 and is more than two years old.

That notwithstanding, the 2001 UWMP was prepared under the Public Resources Code that existed at that time, a code that was significantly revised as a result of SB 221 and SB 610. Moreover the planning assumptions and projections used in the UWMP do not appear to reflect the current Marina Heights project specific plan and therefore the WSA's reliance upon the 2001 UWMP may be unwarranted. In addition, it is cause for concern that the WSA "incorporates by reference and relies upon" the UWMP but the UWMP was not circulated with the WSA so that the public could evaluate the UWMP's planning assumptions and projections

RESPONSE G-2: Recommendation that MCWD update the UWMP is noted.

Opinion regarding the validity of MCWD using the current UWMP in evaluating the water demand and supply issues associated with proposed development within the Marina Heights Specific Plan area is noted.

Opinion regarding the need for MCWD to include the current UWMP as part of the WSA on the Marina Heights Specific Plan is noted. The current UWMP is available for public review at the Marina Coast Water District offices at 11 Reservation Road in Marina, California, or at the MCWD website (<http://www.mcwd.org>).

Use of the current UWMP complies with law. As noted, the UWMP is required to be updated every five years, and the UWMP was approximately two years old at the time the WSA was completed and adopted by the MCWD. The planning assumptions and projections of the UWMP are valid; by necessity, an urban water management plan utilizes certain assumptions and projections. The significant differences between those assumptions/projections are discussed in the SEIR and the WSA.

Comment G-3: Section 2.0 "Project Water Demands" Table 2-1 does not provide sufficient data for evaluation of its conclusions. For instance, what was the square footage of the "comparable" homes in each category of the "Land Use" column? The table shows lot square footage but does not address the square footage of the homes and how many plumbing fixtures are included in the comparison homes. What existing townhouses were used to determine the actual water use factors? In Preston and Abrams Parks, both townhouse development on the former Fort Ord, there is a substantial variance between each park's per unit water usage. Were either, or both, of these development used to determine the water use factors? Were they "averaged" or were other developments used to determine the water use factors? There should be more detail provided before the projected demands factors are accepted in the City's analysis.

RESPONSE G-3: Opinion regarding the sufficiency of data provided by MCWD in Table 2-1 of the WSA, and request for more detailed information, are noted. As indicated on page 4 of the SUPPLEMENT TO THE EIR, the WSA states that water use estimates for

development proposed within the Marina Heights Specific Plan area were based on actual water use rates within the City of Marina. Although the MCWD did not provide specific data on the amount/number of floor areas/plumbing fixtures for units anticipated within the Marina Heights Specific Plan area, the MCWD believes the figures used would be typical for the type of development proposed by the Project. As shown in WSA Table.2-1, the projected water demands estimates are geared more toward the total acreage to be developed and each housing type within the Specific Plan area, rather than the floor area/plumbing fixtures of each individual unit proposed.

Comment G-4: Section 3.1 "Overall Supplies" The analysis of the ability to deliver water must be based on an evaluation of actual supply in dry, average and wet years. Although conservation, proposed recycled water programs and desalination plans are worthy of consideration in the analysis and should increase the available AF/Yr, we must be cautious about accepting plans, or "paper water", in lieu of actual available "wet" water.

RESPONSE G-4: Recommendation on the need to be cautious in reviewing information regarding future water supplies is noted. The WSA provides the appropriate level of analysis, and indicates that there is actual water, not simply "paper water", available to supply the Project.

Comment G-5: Section 3.2 "Groundwater Supplies" The WSA speaks to the contamination of the Fort Ord wells by TCE, a degreaser and solvent, but does not address the presence in the 180 ft aquifer of carbon tetrachloride, a solvent used in the 1940's and 1950's. Both of these agents have a number of plumes in the 180 ft aquifer that, per current mapping done as part of the Fort Ord base cleanup efforts, appears to be "draining" toward a hole in the aquitard, posing a potential threat to nearby Fort Ord wells.

The WSA points to the advancing seawater intrusion and states that the demands of this project will "proportionally increase the rate of seawater intrusion and the need for the District to protect its supply from this intrusion." Overdrafting increases the advance of seawater and threatens the recharging of the 900 ft aquifer that supplies Central Marina. The WSA does not provide a detailed plan of just how the supply will be protected from the overdrafting and the resultant seawater intrusion.

RESPONSE G-5: Comment regarding TCE and carbon tetrachloride contamination is noted. The WSA addresses TCE as an existing contaminant in one of the three MCWD water supply wells on the former Fort Ord. To date, carbon tetrachloride has not contaminated any of these wells, and is not addressed in the WSA.

Comment regarding the absence of "a detailed plan of just how the supply will be protected from the overdrafting and the resultant seawater intrusion" in the MCWD's WSA is noted. Such a plan is not required as part of a Water Supply Assessment and Written Verification of Water Supply.

Comment G-6: Section 3.4 "Marina Heights Demands vs. FORA Allocations and City of Marina Development Plans" The WSA states, "Based on currently anticipated water demands and currently available supplies, the District will not be able to provide water service to all the currently anticipated development in the portion of the City of Marina on the former Fort Ord." Table 3-3 (page 18) concludes that the total demand of all the currently anticipated projects will be 1703 AF/Yr, substantially less than the current FORA allocation of 1175 AF/Yr.

University Villages, a mixed use project, will be the "engine that drives" this economic development conveyance of former Fort Ord lands and the City should not risk jeopardizing the University Villages project's water supply by over-committing AF/Yr to the Marina Heights project.

RESPONSE G-6: WSA Table 3-3 indicates that total water demand estimates for the existing and anticipated future development in the Marina portion of the former Fort Ord developed using Marina Use Factors and MCWD Current Use Factors vary (1,144.4 AF/Yr and 1,703.7 AF/Yr, respectively). As indicated in this comment, the 1,703.7 AF/Yr estimate developed using the MCWD Current Use Factors would exceed the current water supply allocation of 1,175 AF/Yr for this area.

Opinion regarding the effect that City of Marina approval of the Marina Heights project might have on the supply of water available to support the University Villages project is noted.

Comment G-7: Section 3.6 "Groundwater Legal Entitlement" I caution the City to not rely upon "paper water" in an assessment of sufficient water supply.

RESPONSE G-7: Note of caution acknowledged.

Comment G-8: Section 6.0 "Water Supply Sufficiency" This section again raises a cautionary flag regarding seawater intrusion. In its analysis of the water supply sufficiency, the City should take into account the quality of the water, not just the quantity. Obviously, this is difficult to quantify but it should be factored into the analysis.

On page seven, the WSA expresses the District's commitment: "to monitor and develop better information on the rate of seawater intrusion." It goes on to state, "Provided this monitoring is continued and planning and investment proceeds to develop new supplies ahead of any potential loss of existing groundwater wells, a reliable supply can be maintained for the Marina Heights development as well as the District as a whole." The City should regard this as a "provisional" statement, not a guarantee.

RESPONSE G-8: Recommendations that the City of Marina consider water quality in addition to water quantity in evaluating water supply issues, and that the City of Marina not regard the information presented in the WSA as an MCWD guarantee of the availability of water for future development within Marina, are noted.

Comment G-9: 10.0 "Summary Water Supply Sufficiency Determination" The conclusion reached in this section, "the District has determined that its water supplies are currently sufficient to meet the projected water demands associated with the proposed project, in addition to other planned demands ..." is inconsistent with its statement (as noted above) in Section 3.4.

RESPONSE G-9: Opinion regarding the consistency of statement presented in MCWD's WSA is noted.

Comment G-10: In conclusion, I urge the City to do a thorough analysis of the availability of water to serve this and the other planned former Fort Ord developments by testing the planning assumptions and demand projections of the WSA, in addition to encouraging thorough public discussion and analysis.

RESPONSE G-10: Recommendation that the City of Marina conduct additional analysis on the availability of water to supply future development in the former Fort Ord and provide for additional public discussion on water supply issues is noted.



Arnold
Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Jan Boel
Acting Deputy
Director

February 9, 2004

CITY OF MARINA

FEB 13 2004

PLANNING

LETTER H

Haywood Norton
City of Marina
211 Hillcrest Avenue
Marina, CA 93933

Subject: Marina Heights Specific Plan/Abrams "B" Housing Project
SCH#: 2003021012

Dear Haywood Norton:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on February 6, 2004, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

H-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse

**Document Details Report
State Clearinghouse Data Base****LETTER H (continued)**

SCH# 2003021012
Project Title Marina Heights Specific Plan/Abrams "B" Housing Project
Lead Agency Marina, City of

Type EIR Draft EIR

Description A Final EIR for the Project was certified by the Marina City Council on November 18, 2003. The Marina Heights Specific Plan/Abrams "B" Housing project EIR analyzes the environmental impacts of the proposed housing project and associated proposals. The project will remove 828 abandoned housing units on the 248-acre Marina Heights Project site and replace the units with a combination of 1,050 new townhouse, cottage, and single family residential housing units. The project will include 35.63 acres of parks, greenbelts, and open space. The new housing will provide affordable and market-rate housing opportunities.

Lead Agency Contact

Name Haywood Norton
Agency City of Marina
Phone 831.884.1220
Fax
email
Address 211 Hillcrest Avenue
City Marina **State** CA **Zip** 93933

Project Location

County Monterey
City Marina
Region
Cross Streets California Avenue, Imjin Parkway, Reservation Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways 1
Airports Marina Municipal
Railways
Waterways Pacific Ocean
Schools Marina, Olson, etc.
Land Use R-4 Multiple Family Residential
R-1 Single Family Residential
V-H Village Homes

Project Issues Water Quality; Water Supply

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 3; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; Caltrans, District 5; California Highway Patrol; Regional Water Quality Control Board, Region 3; Native American Heritage Commission; Department of Housing and Community Development

Date Received 12/24/2003 **Start of Review** 12/24/2003 **End of Review** 02/06/2004

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter H: Terry Roberts, Director, State Clearinghouse (2/9/04)

Comment H-1: The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on February 6, 2004, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

RESPONSE H-1: Comment noted.

Summary of Comments from Public Hearing, January 20, 2004

- Alan Post: There are problems with the provision of water. The wells are already operating at pumping capacity. Both the Marina Heights project and the University Villages project need an additional 350 acre/feet/year of water, but only 1,073 acre/feet/year is all that is available. There are problems with TCE contamination and saltwater intrusion. Conservation is critical. The momentum for this project has gotten ahead of itself. The project should be redesigned for affordability. PH-1
- Chris Ponzetta: If there is no Marina Heights project, there will be no Marina High School. There is enough water available to support the Marina Heights project. PH-2
- Allison Rhymes: Is there enough water? Is the developer 100 percent certain that there will be enough water? The developer says yes, there is enough water to support this project and other projects also. It is time to redevelop Fort Ord. When the Army housing was there, they had water, but no one paid for any of the utilities. This is not a major crisis. I support Marina Heights because of the affordable units to be provided. I give it two thumbs up. PH-3
- Juan (unidentified): Studies show that there is enough water. Instructors at the Defense Language Institute need housing. These instructors serve the Army, which is particularly important given the current need for language training associated with operations in Iraq. PH-4
- Paula Pelot: There are inconsistencies in the document. It relies on the 2000 Urban Water Management Plan (UWMP), which has not been circulated (although it is on the web). On page 16, there is a clear statement that it won't provide enough water. Don't cut off other development (which would provide jobs and housing), and don't rubber stamp this. Circulate the UWMP. There are problems with Fort Ord wells in the upper and lower aquifers. What are the effects of this project on that? This came up in the BRAC Community Involvement Workshops. Publish it. Think it over. PH-5
- Tammy Poe: When I lived at Fort Ord, we did not worry about water use or leaks. New buildings would have new plumbing. At Preston Park, PVC pipes were left exposed to the sun. There is no problem with the water. PH-6
- Gary Wilmot: I've served on the Water Board when they wanted to join Zone 2 and Zone 2A, which would let us go as far as King City for water. The Basin Management Plan is moving toward solving the saltwater intrusion problem. FORA set a limit on water supply in response to the Sierra Club to provide an artificial cap on growth. The concern about saltwater intrusion is not a valid fear. PH-7
- (unidentified): Is Seaside better off than Marina? They are building now. PH-8
- Sarah Murray: I want a Water Conservation Plan for Marina Heights. We owe it to the kids and animals. The cap is important. Marina Heights should be a model of water conservation. I'm concerned about the 2001 UWMP being the basis for this report, since it is not a match for the 2003 UWMP – the numbers don't match. Waste management in Marina is a model, PH-9

and Marina Heights should also provide a model for water conservation. I care about having a high school.

Justina Walsh: The WSA says that increased drilling could increase saltwater intrusion. We pay a parcel tax to fight this. This is a larger project than the water study anticipated. I don't want Marina to become the goat of the Salinas Valley if we use too much water, but I wouldn't blame them if they felt that way.

PH-10

Brad Plummick: In considering this, the water district seemed to be wondering how long they could drag this process out before being sued. The last possible day was the delivery date of the report. They pulled numbers out of a hat, shifting from the use of anticipated use rates for the demand estimate to actual use rates in developed portions of Marina. My neighbors drown their lawns, and could reduce their water use. At Cypress Gardens, the new system reduced water use by 30 percent, so there is a lot of waste. Outside interests (such as Landwatch) don't live here. They've used everything to stop this project. Today it is water. Let's move it on.

PH-11

Mike Owen: Keep existing plants (that may be native and drought tolerant) as a way to conserve water.

PH-12

Councilmember Gray: What is the status of the EIR? Was a Notice of Determination filed?

PH-13

Haywood Norton: There was no Notice of Determination filed, so the Council will be acting on the complete EIR on March 3.

Councilmember Delgado: The 2001 UWMP table says that 1,700 acre/feet/year of water is needed, but this is 48 percent more than the 1,175 acre/feet/year that we are allocated now. Isn't this inconsistent?

PH-14

Haywood Norton: We'd like to respond to that question in the written responses to comments.

Councilmember Morrison: On Table 3-2, there are two allocations: 532 acre/feet/year for water losses (is that leaks?) and 431 acre/feet/year for a strategic reserve (only to be tapped in an emergency?). If that is being held back and not being used, then there should be plenty of water available.

PH-15

Haywood Norton: We'd have to look at that again when preparing the responses.

Councilmember Delgado: On page 16 it says that the District can't provide water for all anticipated development at Fort Ord. Is it because it is based on the 2001 document (UWMP)? This seems like a great discrepancy. I think it is referring to the Table. It is asking if there is enough water for Marina Heights. We should first ask if Marina Heights has demonstrated that the development would incorporate water conservation measures designed to save every drop possible.

PH-16

Mayor: The developers from Marina Heights, Cypress Grove and University Villages should join to deal with the Water District in resolving water issues. FORA will be revisiting the current water allocations in August. PH-17

Responses to Comments from Public Hearing (1/20/04)

Comment PH-1: There are problems with the provision of water. The wells are already operating at pumping capacity. Both the Marina Heights project and the University Villages project need an additional 350 acre/feet/year of water, but only 1,073 acre/feet/year is all that is available. There are problems with TCE contamination and saltwater intrusion. Conservation is critical. The momentum for this project has gotten ahead of itself. The project should be redesigned for affordability.

RESPONSE PH-1: Comment noted. The MCWD's WSA addresses the provision of water to support development proposed within the Marina Heights Specific Plan area. It indicates (WSA page 21) that "The District's current groundwater wells have sufficient production capacity to meet the needs of the Marina Heights project." On WSA page 16, the MCWD has also indicated that given the estimated demand for water at the Specific Plan area following development, coupled with the existing water use in the Preston Park and Abrams housing development areas and water to support existing commercial and institutional uses within the City of Marina's jurisdiction within the former Fort Ord, the District would not be able to provide water service to all currently anticipated development in the portion of the City of Marina on the former Fort Ord. The WSA addresses TCE contamination issues on pages 9 and 10, and saltwater intrusion is discussed on pages 11 and 12. Opinion regarding the importance of water conservation is noted. Opinion regarding the need for a redesigned Specific Plan development proposal to provide additional affordable housing is noted.

Comment PH-2: If there is no Marina Heights project, there will be no Marina High School. There is enough water available to support the Marina Heights project.

RESPONSE PH-2: Opinion regarding a linkage between possible future development of the Marina Heights Specific Plan area and possible future development of a Marina High School is noted. Opinion regarding the availability of adequate water to serve the Marina Heights project is noted.

Comment PH-3: Is there enough water? Is the developer 100 percent certain that there will be enough water? The developer says yes, there is enough water to support this project and other projects also. It is time to redevelop Fort Ord. When the Army housing was there, they had water, but no one paid for any of the utilities. This is not a major crisis. I support Marina Heights because of the affordable units to be provided. I give it two thumbs up.

RESPONSE PH-3: Comment regarding the availability of water to serve future development, and statement of support for the proposed Marina Heights project, are noted.

Comment PH-4: Studies show that there is enough water. Instructors at the Defense Language Institute need housing. These instructors serve the Army, which is particularly important given the current need for language training associated with operations in Iraq.

RESPONSE PH-4: Comment noted.

Comment PH-5: There are inconsistencies in the document. It relies on the 2000 Urban Water Management Plan (UWMP), which has not been circulated (although it is on the web). On page 16, there is a clear statement that it won't provide enough water. Don't cut off other development (which would provide jobs and housing), and don't rubber stamp this. Circulate the UWMP. There are problems with Fort Ord wells in the upper and lower aquifers. What are the effects of this project on that? This came up in the BRAC Community Involvement Workshops. Publish it. Think it over.

RESPONSE PH-5: Opinion regarding inconsistencies in MCWD's WSA is noted. As indicated in **RESPONSE G-2**, above, the current UWMP is available for public review at the Marina Coast Water District offices at 11 Reservation Road in Marina, California, or at the MCWD website (<http://www.mcwd.org>).

The MCWD's WSA addresses the provision of water to support development proposed within the Marina Heights Specific Plan area. It indicates (WSA page 21) that "The District's current groundwater wells have sufficient production capacity to meet the needs of the Marina Heights project." On WSA page 16, the MCWD has also indicated that given the estimated demand for water at the Specific Plan area following development, coupled with the existing water use in the Preston Park and Abrams housing development areas and water to support existing commercial and institutional uses within the City of Marina's jurisdiction within the former Fort Ord, the District would not be able to provide water service to all currently anticipated development in the portion of the City of Marina on the former Fort Ord. Opinion regarding the effect City approval of the Marina Heights project would have on other anticipated future development is noted.

See **RESPONSE G-5**, above, which provides a discussion of how the WSA addressed groundwater contamination issues.

Comment PH-6: When I lived at Fort Ord, we did not worry about water use or leaks. New buildings would have new plumbing. At Preston Park, PVC pipes were left exposed to the sun. There is no problem with the water.

RESPONSE PH-6: Comment noted.

Comment PH-7: I've served on the Water Board when they wanted to join Zone 2 and Zone 2A, which would let us go as far as King City for water. The Basin Management Plan is moving toward solving the saltwater intrusion problem. FORA set a limit on water supply in response to the Sierra Club to provide an artificial cap on growth. The concern about saltwater intrusion is not a valid fear.

RESPONSE PH-7: Comment, and opinion related to the concern about saltwater intrusion, are noted.

Comment PH-8: Is Seaside better off than Marina? They are building now.

RESPONSE PH-8: Comment noted.

Comment PH-9: I want a Water Conservation Plan for Marina Heights. We owe it to the kids and animals. The cap is important. Marina Heights should be a model of water conservation. I'm concerned about the 2001 UWMP being the basis for this report, since it is not a match for the 2003 UWMP – the numbers don't match. Waste management in Marina is a model, and Marina Heights should also provide a model for water conservation. I care about having a high school.

RESPONSE PH-9: Request for development of a water conservation plan for Marina Heights is noted. Opinion regarding the importance of the current water allocation within the former Fort Ord is noted. Opinion regarding Marina Heights providing a model of water conservation is noted. The current UWMP was approved by the MCWD in December 2001. Statement of concern regarding the development of a Marina High School is noted.

Comment PH-10: The WSA says that increased drilling could increase saltwater intrusion. We pay a parcel tax to fight this. This is a larger project than the water study anticipated. I don't want Marina to become the goat of the Salinas Valley if we use too much water, but I wouldn't blame them if they felt that way.

RESPONSE PH-10: As indicated in this comment, the WSA addresses salt water intrusion on pages 11 and 12, and states that the water demands associated with the Marina heights project would proportionally increase the rate of seawater intrusion and the need for the District to invest to protect its supply from this intrusion. The WSA estimates water demand associated with the Marina Heights project as currently proposed, using current water use values in the City of Marina. While the level of development proposed within the Marina Heights Specific Plan area is greater than has been anticipated under the Marina General Plan, this increased level of development actually provides the basis for the analysis provided in the MCWD Water Supply Assessment. Opinion regarding the undesirability of the City of Marina using more water than other communities in the region is noted.

Comment PH-11: In considering this, the water district seemed to be wondering how long they could drag this process out before being sued. The last possible day was the delivery date of the report. They pulled numbers out of a hat, shifting from the use of anticipated use rates for the demand estimate to actual use rates in developed portions of Marina. My neighbors drown their lawns, and could reduce their water use. At Cypress Gardens, the new system reduced water use by 30 percent, so there is a lot of waste. Outside interests (such as Landwatch) don't live here. They've used everything to stop this project. Today it is water. Let's move it on.

RESPONSE PH-11: Opinions regarding the motives of MCWD in the timing of the adoption of the WSA, and the MCWD use of current Marina water use rates as a means of estimating future water demand within the Marina Heights Specific Plan area, are noted. Comment regarding the effectiveness of modern irrigation systems in use at Cypress Gardens as a means of reducing water demand is noted. Opinion regarding the actions of “outside interests” in response to the Marina Heights project is noted. Request to keep the project approval process moving forward is noted.

Comment PH-12: Keep existing plants (that may be native and drought tolerant) as a way to conserve water.

RESPONSE PH-12: Request to keep existing plants in place within the Marina Heights Specific Plan area as a way to conserve water is noted.

Comment PH-13: What is the status of the EIR? Was a Notice of Determination filed?

Haywood Norton: There was no Notice of Determination filed, so the Council will be acting on the complete EIR on March 3.

RESPONSE PH-13: Comment noted.

Comment PH-14: The 2001 UWMP table says that 1,700 acre/feet/year of water is needed, but this is 48 percent more than the 1,175 acre/feet/year that we are allocated now. Isn't this inconsistent?

Haywood Norton: We'd like to respond to that question in the written responses to comments.

RESPONSE PH-14: Opinion regarding the consistency of MCWD's WSA is noted. WSA Table 3-3 indicates that total water demand estimates for the existing and anticipated future development in the Marina portion of the former Fort Ord were developed using Marina Use Factors and MCWD Current Use Factors vary (1,144.4 AF/Yr and 1,703.7 AF/Yr, respectively). As indicated in this comment, the 1,703.7 AF/Yr estimate developed using the MCWD Current Use Factors would exceed the current water supply allocation of 1,175 AF/Yr for this area.

Comment PH-15: On Table 3-2, there are two allocations: 532 acre/feet/year for water losses (is that leaks?) and 431 acre/feet/year for a strategic reserve (only to be tapped in an emergency?). If that is being held back and not being used, then there should be plenty of water available.

Haywood Norton: We'd have to look at that again when preparing the responses.

RESPONSE PH-15: In WSA Table 3-2, the 532 AF/Yr allotment for "allowance for line losses" and the 431 AF/Yr allotment for "FORA Strategic Reserve" both represent groundwater resources that are not generally available to support development in the City of Marina's portion of the former Fort Ord (one possible exception might be the possibility of the City of Marina "borrowing" up to 150 AFY of water from the FORA strategic reserve to support visitor-serving and/or commercial development on an interim basis, to be "paid back" once the anticipated MCWD water augmentation program has been implemented). As indicated in this table, the FORA allocation to the City of Marina available to support future development within the former Fort Ord (first line of the table) is 1,175 AF/Yr. Were FORA to decide to "release" the 532 AF/Yr allotment for "allowance for line losses" and the 431 AF/Yr allotment for "FORA Strategic Reserve" to support development (rather than taking system leakage into account and providing a margin of water supply safety through the establishment of a strategic reserve), it is likely that the 963 AF/Yr. that could then become available would be divided among those jurisdictions identified in this table (City of Marina, City of Seaside, CSU Monterey Bay, UC MBEST, City of Del Rey Oaks, City of Monterey, U.S. Army, County/State Parks). It would probably not mean that the City of Marina could expect to see its allocation of water to support development within the former Fort Ord increased by the full 963 AF/Yr. that could theoretically become available were FORA to act to make water currently allocated for those two purposes on WSA Table 3-2 available for other uses, as suggested by this comment.

Comment PH-16: On page 16 it says that the District can't provide water for all anticipated development at Fort Ord. Is it because it is based on the 2001 document (UWMP)? This seems like a great discrepancy. I think it is referring to the Table. It is asking if there is enough water for Marina Heights. We should first ask if Marina Heights has demonstrated that the development would incorporate water conservation measures designed to save every drop possible.

RESPONSE PH-16: The amount of water allocated to MCWD to support development within the Marina portion of the former Fort Ord is currently 1,175 AF/Yr. As indicated in the WSA, the estimated water demand generated by anticipated development within this area would be approximately 1,703.7 AF/Yr., using MCWD Current Use Factors and Estimated Water Use values (see WSA Table 3-3). WSA Table 3-3 was not part of the MCWD's 2001 UWMP. Request to have the proponents of the Marina Heights project demonstrate that the development would incorporate water conservation measures designed to save every drop of water possible is noted.

Comment PH-17: The developers from Marina Heights, Cypress Grove and University Villages should join to deal with the Water District in resolving water issues. FORA will be revisiting the current water allocations in August.

RESPONSE PH-17: Comments noted.

Water Supply Assessment and Written Verification of Supply

Marina Heights Specific Plan

Prepared for the Marina Coast Water District
by



Byron Buck & Associates
Water Resources and Environmental Consulting

December 15, 2003

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1.0 Introduction and Purpose of Report

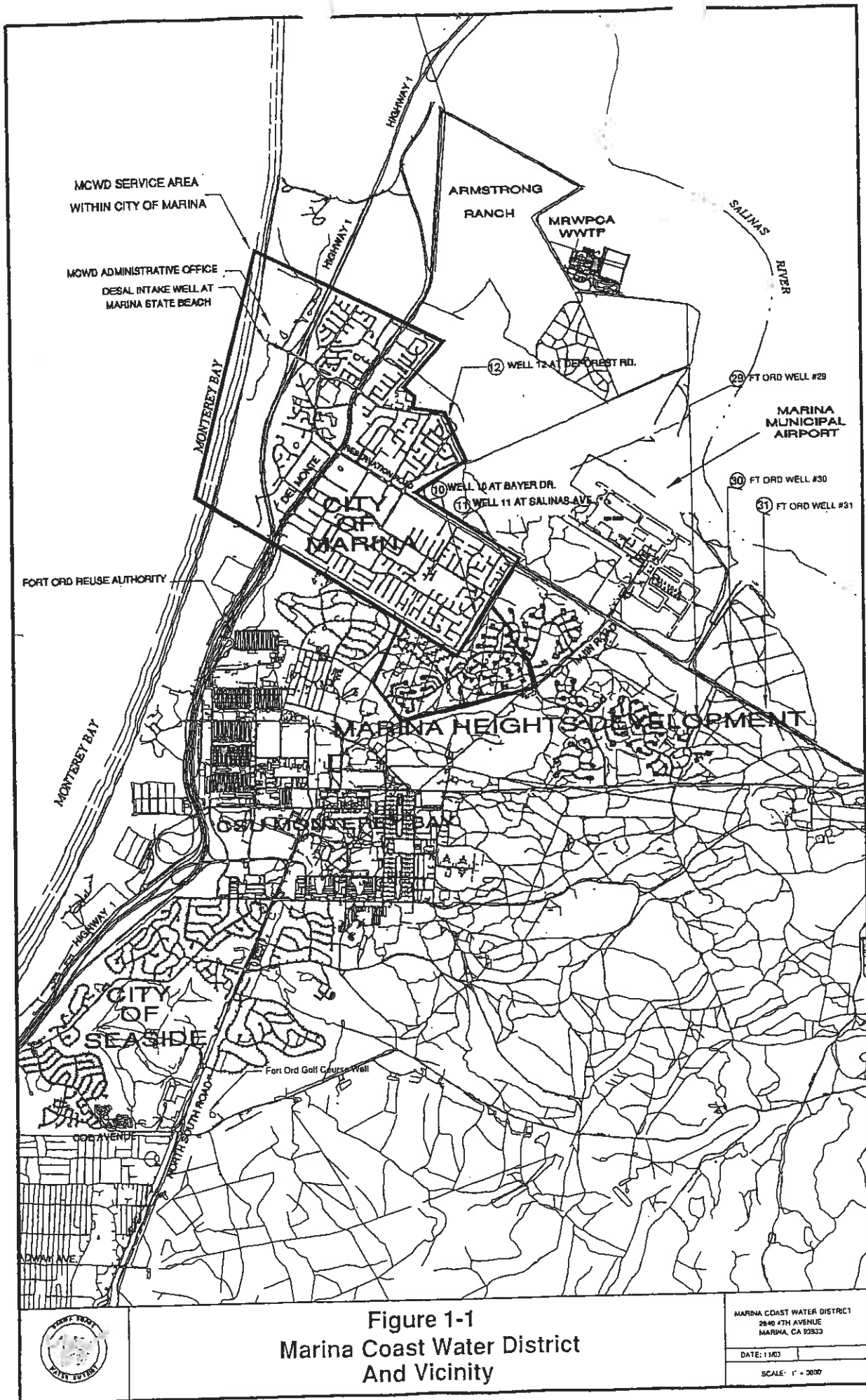
1.1 Project Description

The City of Marina is proposing to adopt a Specific Plan for the Marina Heights Project. This project consists of 1,050 residential units and 5.85 acres of parkland in the City of Marina. Residential units include 102 townhomes ranging in size from one to three bedrooms, 188 cottage homes with from one to three bedrooms, 337 smaller single family homes with three or four bedrooms, 338 standard single family homes with three or four bedrooms and 85 estate homes with between three and five bedrooms. The homes will be arrayed in five distinct neighborhoods with the townhomes dispersed throughout the project site.

1.2 Purpose of Water Supply Assessment.

The City of Marina is required to produce this water supply assessment (Water Code section 10910 et. seq.) and written verification of supply (Government Code section 66473.7 (b)(1)) as part of the development approval consideration process. It has requested the Marina Coast Water District, the public water supplier for the area of the development to analyze the available supplies and produce this report.

Figure 1-1 shows the boundaries of the Marina Coast Water District and the location of the proposed development.



1.3 Requirements for Water Supply Assessments

On October 9, 2001 former Governor Gray Davis signed into law Senate Bills 610 (Costa) and 221 (Kuehl) (Chapters 643 and 642, respectively, Statutes of 2001) that require a water supply assessment in conjunction with project review under the California Environmental Quality Act (CEQA), and a written verification of water supply where a tentative tract map is proposed for approval. The general intent of SB 221 and 610 was to create additional assurance that certain new developments could be provided with a reliable supply of water and that the effect of certain new developments upon existing water users both within the service area of the public water provider and those dependent on common sources of water were informed regarding the proposed water use, its impacts and plans to maintain reliable supplies. The legislation also serves to better inform decision makers regarding the water supply implications of development addressed by the measures.

SB 221 created a specific requirement for a written verification that a sufficient supply of water exists for any residential developments of 500 or greater units as a condition of approval of a tentative tract or parcel map. Local land use approval authorities may not approve such maps if a sufficient supply cannot be demonstrated. Under the statute, a sufficient supply is defined as the total water supply available during normal, single dry and multiple dry years within a 20-year projection that will meet the water suppliers existing and planned future uses (Government Code 66473.7(a)(2).) This does not mean that 100% of the development's unrestricted water demand must be met 100% of the time, nor does it mean the new development may not have any impact on the service level of existing customers. A "sufficient water supply" may be found to exist for a proposed subdivision as well as for existing customers, even where a drought-induced shortage will be known to occur, as long as a minimum water supply can be estimated and planned for during a record drought (ACWA, 2002).

SB 610 requires that a water supply assessment be prepared for certain developments, including residential developments in excess of 500 units, where an environmental impact report or negative declaration is being prepared under CEQA. The requirement is one that adds a specific water supply assessment protocol for land use jurisdictions to follow and consider in evaluating the environmental impacts for a proposed project. The Water Supply Assessment must be included in any CEQA document prepared for the project. The City of Marina must determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

1.4 Relationship of This Document to the Marina Coast Water District Urban Water Management Plan

The Urban Water Management Planning Act requires municipal water providers serving over 3,000 acre-feet of water (1 acre-foot = 325,900 gallons) or having 3,000 service connections to prepare plans (urban water management plans) on a five-year, ongoing basis demonstrating their continued ability to provide water supplies for current and future expected development under normal, single dry and multiple dry year scenarios. These plans also require the assessment of urban water conservation measures, and wastewater recycling. They also require, pursuant to Section 10632 of the California Water Code, a water shortage contingency plan, outlining how the District will manage water shortages of up to 50% of their normal supplies in a given year. Like SB 610 and 221, specific levels of supply reliability are not mandated (i.e., whether a specific level of demand can be met over a designated frequency), rather, the law provides that a specific level of reliability is a local policy decision of the water provider.

The Marina Coast Water District's most recent Urban Water Management Plan was adopted in December of 2001. As provided for in the law, this report incorporates by reference and relies upon the planning assumptions and

projections of that Plan in assessing the water demand of the proposed project relative to the overall increase in demands expected by the District.

2.0 Project Water Demands

Table 2-1 depicts average annual water demands based on water use factors deemed appropriate for land uses proposed in the Marina Heights specific plan in the context of the region's geography and climate. These factors are based on actual water use within the City of Marina of similar units and recognizing new housing units will be compliant with current plumbing code standards requiring low flow plumbing devices and incorporating lower use water using appliances. Actual water demands will vary according to water use behavior of the residents and the ultimate landscape development and maintenance practices. These estimates will vary year-to-year by as much as seven percent depending on weather and precipitation in a given year, with the greater use in dryer years.

Table 2-1 Marina Heights Projected Water Demands

Land Use	Units	Lot Size sq. ft.	Demand Factor af/unit/yr	Annual Water Use af/yr
Townhomes	102	-	0.25	25.5
Cottages	188	2,625	0.25	47.0
Single Family	337	5,000	0.33	111.2
Single Family	338	6,000	0.33	111.5
Estate Units	85	10,890- 21,790	0.5	42.5
Parkland - turf	3.0 acres		2.5 af/acre	7.5
Parkland - other	1.5 acres		1.5 af/acre	4.3
Total				349.5

The Marina Coast Water District will track actual usage of new development and adjust water use factors as necessary to reflect actual use history and to

maintain account balances for land use jurisdictions share of water allocated to the redevelopment of Fort Ord, as discussed in section 3.3, Groundwater Management.

3.0 Available Water Supply

3.1 Overall Supplies

The Marina Coast Water District, a county water district and public agency, is the purveyor of water for the City of Marina and the former Fort Ord, also known as the Ord Community Service Area. The District's water supply is currently from groundwater sources and a small desalination plant. As discussed in the District's Urban Water Management Plan, the District has ongoing conservation programs and is executing plans to introduce recycled water and additional desalination supplies for the former Fort Ord.

3.2 Groundwater Supplies

The large majority of potable water for the Marina Coast Water District (District) comes from wells developed in the Salinas Valley Groundwater Basin. This groundwater basin underlies the Salinas Valley from San Ardo to the coast of Monterey Bay and is divided into four hydrologically linked subareas. These areas are the Pressure, East Side, Forebay and Upper Valley areas (**Figure 3-1**). The basin consists of what has been historically thought of as three main aquifers, an upper aquifer known as the upper or 180-Foot aquifer, a middle or 400-Foot aquifer and a deeper aquifer, known as the deep or 900 Foot aquifer. While originally these aquifers were thought to be confined in the Marina region, recent stratigraphic analysis has indicated that these aquifers are connected hydraulically, with water from the upper layers recharging the lower layers. Additionally, the deep or 900 foot aquifer is in reality a series of aquifers, not all of which are hydraulically connected.

Seawater intrusion into the upper and middle aquifers of the Pressure sub-area has been documented since the 1940's and is continuing (see also Marina Coast UWMP, 2001). A chloride concentration of 500 milligrams per liter (mg/L) is the short-term EPA Secondary Drinking Water Standard for chloride and is used as a measure of impairment of water. The line of chloride concentration of 500 mg/l water is therefore used as the basis for determining the seawater intrusion front. Seawater intrusion has forced the District to close its wells in the upper and middle aquifers and drill wells in the deep aquifer. The former Fort Ord's original shallower groundwater wells in the Salinas Basin were located closer to the coast. These wells progressively suffered from advancing seawater intrusion and new wells were constructed further inland in the Pressure sub-area of the Salinas Basin, and completed in the upper and middle aquifers.

In June 2002, a contaminant called trichloroethylene ("TCE") was found in one of the three water supply wells at the former Fort Ord. TCE is a cleaning solvent. The contamination is coming from landfills near Imjin Road that were formerly used by the Army but are now closed. The Army has responded to the landfill contamination problem by installing extensive cleanup systems to remove the contamination and prevent its further migration. The Army has also been monitoring groundwater quality at the former Fort Ord for a number of years to understand the location and movement of groundwater contamination caused by the closed landfills.

The amount of TCE found in the one well was just above detection limits at 0.53 parts per billion. State and federal safe drinking water standards allow a Maximum Contaminant Level for TCE of 5.0 parts per billion, or approximately one full magnitude higher than detected. Detection of TCE, even at the low concentration of 0.53 parts per billion, was reported, as required by law, to the California Department of Health Services (DHS). No additional action was deemed necessary by the DHS because the concentration levels are well below 5.0 parts per billion. Both the MCWD and the Army have been regularly

monitoring the Fort Ord wells to see whether traces of TCE continue to exist. No TCE was detected in the monitoring done in July 2003.

Over the past year, fluctuations in the readings have ranged from undetected to a high of 0.81 parts per billion, still substantially below the health standard of 5.0 parts per billion.

In order to further reduce any potential contamination before water is distributed to housing and facilities at the former Fort Ord, water from the well which has had TCE detected is being blended with water from other wells that do not have traces of TCE. Blending is an approved method for diluting contaminants. In this case, blending serves as an extra precautionary assurance.

The detected TCE level is already very low and is well within the mandated state and federal health standards. In addition, the MCWD has voluntarily reduced pumping of water from the affected well.

The MCWD is continuing to monitor the affected well, and all other wells, for TCE and/or any other contaminants on a regular basis. Any changes due to increased pumping levels in other parts of the aquifers from which MCWD draws its water will be monitored and appropriate actions taken. Meanwhile, the drinking water supply at the former Fort Ord remains completely safe to drink.

The Salinas Basin is also suffering from nitrate contamination, a pollutant coming primarily from animal confinement activities (dairies, feedlots) with contribution from irrigated agriculture, sewage treatment plant effluent and septic tanks. This contamination is a concern, particularly in upper reaches of the 180 foot aquifer. Many contaminated wells exceed the State health standard of 45mg/l of Nitrate as NO_3 . Nitrate levels in the 400 foot aquifer are low due to intervening clay layers between the 180 and 400 foot aquifers. No nitrate problems are evident in any of the District's wells.

Total basin groundwater demands are approximately 463,000 acre-feet per year, and the basin is overdrafted by an estimated 15,000 acre-feet annually (Salinas Valley Water Project EIR 1998). Withdrawals by the District are shown in **Table 3-1**. Other than the District, only a small number of wells, some of which also draw from the middle aquifer, tap the deep aquifers. Prior to receiving recycled water, there were agricultural lands in the Castroville area that received their water supplies from the deep aquifers. These agricultural wells are currently idle but remain part of the monitoring network overseen by the Monterey County Water Resources Agency (MCWRA), manager of the Salinas Basin.

Table 3-1 MCWD Groundwater Production (AFY) 1998-2003

Year	City of Marina	Ord Community
1998	2160	n/a
1999	2241	2396
2000	2300	2371
2001	2285	2228
2002	2306	2137

Recent preliminary findings regarding the deep aquifers in the vicinity of Marina indicate that pumping from the deep aquifers can affect the rate of seawater intrusion in the middle and upper aquifers as the deep aquifers' sources of recharge are these overlying aquifers. In other words, while abandonment of wells in the upper and middle aquifers for wells in the deep aquifers can restore potable supplies, they do not lessen the landward progression of seawater intrusion. Additionally, increased pumping of the deep aquifers is expected to increase the rate of seawater intrusion in the middle and upper aquifers, according to the Deep Aquifer Investigative Study, WRIME, May 2003. Among other issues, this report analyzed the increasing flow rate of landward movement of seawater into the freshwater aquifers (groundwater flow across the coast) or, seawater intrusion. It found that as pumping in the deep aquifers increased, the landward flow of groundwater increased. The report assessed these increases based upon multipliers of pumping from baseline conditions. Total baseline pumping for the analysis was set at 4,800 acre-feet per year and multipliers of

two to fivefold the baseline pumping were modeled. Expected pumping increases as described in the UWMP from 2000 to the year 2020 is about 6,100 acre-feet or about 2.14 times baseline modeled pumping. Based on the outputs of the model, the landward flow of groundwater is estimated to increase annually by about 675 acre-feet at 2020 if expected UWMP demands are realized. Demands of the Marina Heights project were anticipated in the 2001 UWMP. These demands will proportionally increase the rate of seawater intrusion and the need for the District to invest to protect its supply from this intrusion.

3.3 Groundwater Management

Two regional water management agencies have jurisdiction within the former Fort Ord territory. Only the Monterey County Water Resources Agency (MCWRA) is responsible for regulation and supply of water from the Salinas Groundwater Basin. The Monterey Peninsula Water Management District (MPWMD) is responsible for regulation and supply of water from the Seaside Groundwater Basin. The Marina Coast Water District only relies on groundwater from the Salinas Groundwater Basin to supply water to Marina Area lands and the Ord Community.

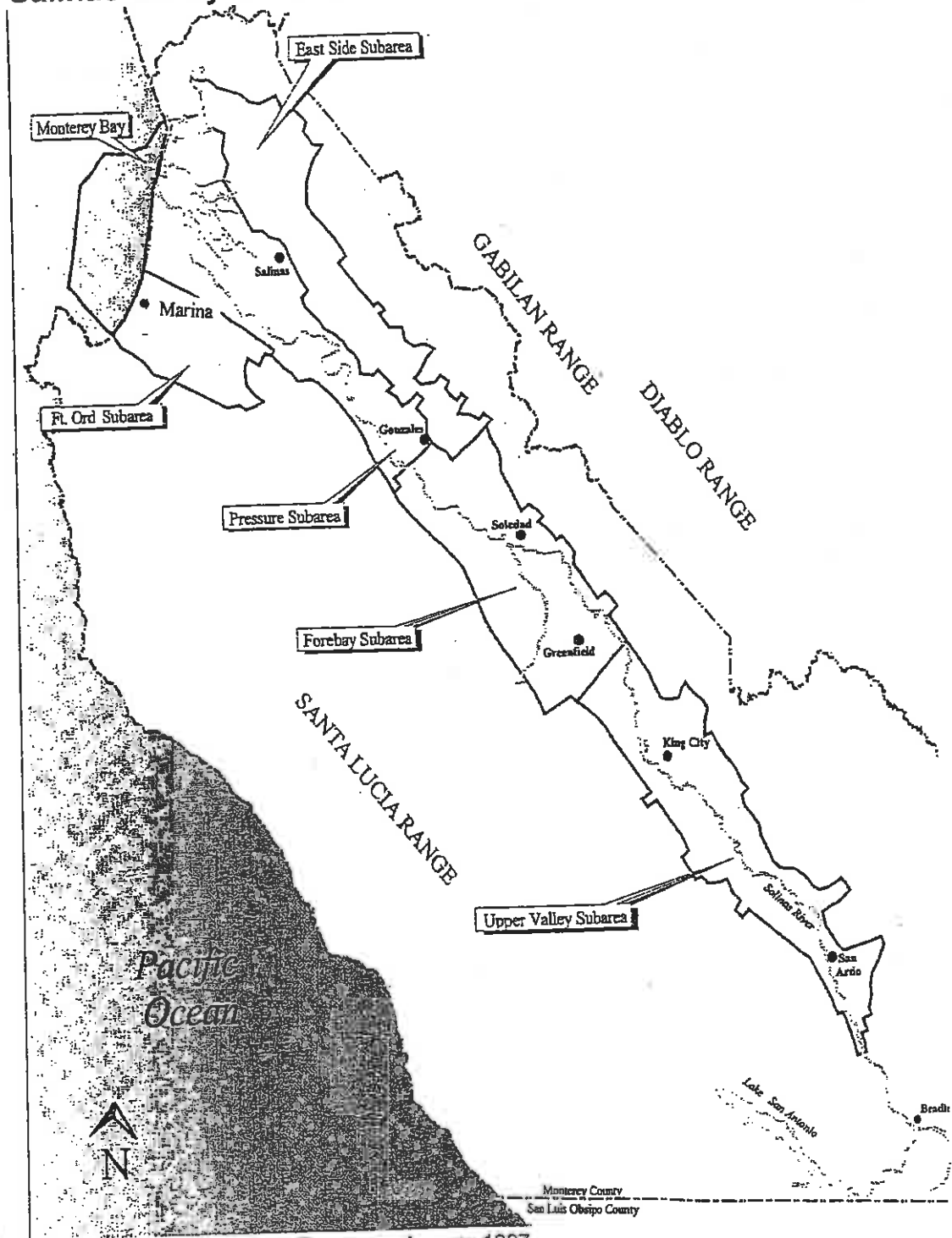
As noted above, the potable water supply at the former Fort Ord is from the Pressure zone of the Salinas Groundwater Basin. The southwestern portion of the Salinas Groundwater Basin underlies the northern and southeastern segments of the former Fort Ord.

Both the Army and the District have agreements with the MCWRA, which allow the District to participate in the regional agency's basin management planning process. Under the terms of the agreements, former Fort Ord lands and the District's service area were annexed into MCWRA Zone 2 and 2A. The Army's agreement allows for a combined annual withdrawal of up to 5,200 AFY from the 180-foot and 400-foot aquifers, with an additional annual withdrawal of up to 1,400 AFY from the deep aquifer, totaling 6,600 acre-feet, or about the historic

demand from Army uses at Fort Ord. The groundwater available to the Ord Community is allocated by the Fort Ord Reuse Authority (FORA) among the land use or land owning jurisdictions as shown in **Table 3-2**. This table also indicates available groundwater supply to the District via its agreements with the MCWRA that are for a maximum withdrawal of potable water of 3,020 acre-feet per year.

Figure 3-1

Salinas Valley Groundwater Basin and Sub Basins



Source: Monterey County Water Resources Agency, 1997

Additionally, two major private properties, the Armstrong Ranch and the Lonestar property have the contractual right to be annexed to the MCRWA and have groundwater allocations available for use on those properties as noted in Table 3-2.

Table 3-2 Water Supply Currently Available to Marina Coast Water District

Fort Ord Reuse Authority Allocation (groundwater)	Annual Acre-feet Allotment or supply
City of Marina	1,175
City of Seaside	748
CSU Monterey Bay	1,035
University of California MBEST Center	230
City of Del Rey Oaks	75
City of Monterey	65
Monterey County	560
US Army	1,691
County/State Parks	45
City of Marina (Sphere)	10
Allowance for line losses (10%)	532
FORA Strategic Reserve	431
Rounded subtotal	6,600
Marina Coast Water District by Agreement with MCWRA (groundwater)	3,020
Armstrong Ranch (groundwater)	920
Lonestar Property (groundwater)	500
Subtotal groundwater	11,040
MCWD Desalination Plant	300
Recycled Water – MRWPCA Plant	300
Total	11,640

3.4 Marina Heights Demands vs. FORA Allocations and City of Marina Development Plans

The City of Marina has an allocation of 1,175 acre-feet per year as shown in **Table 3-2**. The proposed Marina Heights development is expected to consume approximately 349.5 acre-feet of this allotment. This amount added to 275 acre-feet of annual use by the existing Preston Park and Abrams housing complexes plus commercial and institutional uses, which are charged to the FORA allocation presently leaves a remainder of 550.5 acre-feet available for future allocation by the City of Marina.

The City of Marina currently has a wide variety of pending or anticipated development projects in addition to the Marina Heights development, as shown in **Table 3-3**. Based on currently anticipated water demands and currently available supplies, the District will not be able to provide water service to all the currently anticipated development in the portion of the City of Marina on the former Fort Ord. The City of Marina must allocate development in the Fort Ord Community within the water use afforded it under its allocation of 1,175 acre-feet per year. This is the maximum amount of water which the Marina Coast Water District may presently serve to City of Marina uses on the former Fort Ord in compliance with its water resource agreements with the County and others relative to Fort Ord lands. For this reason, the Marina Coast Water District will only approve connections in the Fort Ord community up to the point FORA allocations are expected to be exhausted, until other water resources can be secured. Therefore, the amount of additional development anticipated by the District beyond that contemplated in the Marina Heights project is that amount that can be expected to remain within the 1,175 acre-foot allocation.

Table 3-3
Preliminary Comparison of City of Marina vs. MCWD Forecasts of
Expected Water Demands for City of Marina Anticipated Development in 2015
In Acre-Feet per Year

In Acre-Feet per Year								
Land Use	Marina Use Factors and Estimated Water Use				MCWD Current Use Factors and Estimated Water Use			Notes
	Number of Units	Usage Rate	Units of Measure	Demand in AF/Yr	Usage Rate	Units of Measure	Demand in AF/Yr	
Existing Residential	n/a	n/a		171.0	n/a		228.0	Marina estimated; MCWD actual
Cypress Knolls Residential								Marina unit use for renovated and existing units
408 Renovated Units	408 units	0.20	af/unit	81.6	0.25	af/unit	102.0	
72 New Apartments	72 units	0.18	af/unit	13.0	0.25	af/unit	18.0	
4 Community Centers	4 centers	?		3.4			3.4	MCWD default to Marina Estimate
Turf 2.0 acres	2 acres	2.1	af/acre	4.2	2.5	af/acre	5.0	
Subtotal				102.2			128.4	
Marina Heights Residential								
102 Townhomes	102 units	0.18	af/unit	18.4	0.25	af/unit	25.5	
188 Cottage	188 units	0.20	af/unit	37.6	0.25	af/unit	47.0	
675 Single Family	675 units	0.25	af/unit	168.8	0.33	af/unit	226.5	Marina description differs: 760-798 SFR with estate lots
85 Estate	85 units	0.25	af/unit	21.2	0.5	af/unit	42.5	
Parks -3.0 ac. Turf	3 acres	2.1	af/acre	6.3	2.5	af/acre	7.5	Marina assumes only 3.0 acres
2.85 acres non-turf	2.85 acres	n/a		n/a	1.5	af/acre	4.28	Non-turf @1.5 af/ac.yr
Subtotal				227.3			349.5	
University Villages								
481 multi family live-work	481 units	0.18	af/unit	86.6	0.25	af/unit	120.3	MCWD - assume "apartment" style
356 small lot SFR	356 units	0.20	af/unit	71.2	0.33	af/unit	117.5	
136 multi family live-work	136 units	0.18-.20	af/unit	24.6	0.25	af/unit	34.0	Marina- or 123 small lot SFR
Turf - 2.38 acres	2.38 acres	2.1	af/acre	5.0	2.5	af/acre	6.0	
Subtotal				182.4			271.7	
Subtotal Residential				682.9			977.7	
Existing Non-Residential				47.0			n/a	Marina: assumes 10% additional conservation; (institutional + commercial = non residential)
Existing Institutional							24	
Existing Commercial							25	
High School and Elementary School 15.71 acres Irrigated	15.71 acres	0.0003	af/sf	42.4	0.0003/sf	af/sf	46.6	MWCD included in residential 275 Acre-feet
Monterey Peninsula College		2.1	af/acre	33.0	2.5	af/acre	39.3	Marina- less 10% for conservation measures
Satellite Campus		0.0003	af/sf	6.0		af/sf	8.0	Assumes one artificial turf field
School Turf		2.1	af/acre	4.0		af/acre	4.8	Marina: assumes 75% of HS and Elementary rate
Other Co. Educational and Institutional		?		?	?		?	
Local Governmental				?			1.0	MCWD Corporation Yard
Subtotal Institutional				132.4			148.7	
Rec. Cultural Facilities		0.0003	af/sf	3.0	0.0003	af/sf	3.0	Unknown if turf will be included
Subtotal Inst. Cultural				3.0			3.0	

Table 3-3 continued

Land Use	Number of Units	Marina Use Factors and Estimated Water Use			MCWD Current Use Factors and Estimated Water Use			Notes
		Usage Rate	Units of Measure	Demand in AF/Yr	Usage Rate	Units of Measure	Demand in AF/Yr	
Residential Care (Cypress Knolls) 60 beds	60 beds	0.085	af/bed	5.1	0.085	af/bed	5.1	Assume Marina number
Cypress Knolls Retail 26,700 square feet	26,700 sf	0.0003	af/sf	8.0	0.0003	af/sf	8.0	Assume Marina number
University Villages Motel/Hotel - 450 rooms	450 rooms	0.16	af/room	72.0	0.17	af/room	76.5	
Turf - 2.38 acres	2.38 acres	2.1	af/acre	5.0	2.5	af/acre	6.0	
University Villages Retail, Commercial and Office 1.25 million sf	1.25 million sf	0.0001	af/sf avg.	125.0	0.00025	af/sf avg.	312.5	
Turf - 5.23 acres	5.23 acres	2.1	af/acre	11.0	2.5	af/acre	13.1	
Subtotal Commercial				226.1			421.1	
Airport Business Park 741,000 square feet		0.000135	af/sf	100.0	0.0002	af/sf	148.2	
Subtotal Light Industrial				100.0			148.2	
Construction Water Usage				0.0	5.0			
Total City of Marina				1144.4	Total MCWD 1703.7			

Note: no allowance for use of reserves
MCWD Use Factors subject to revision.

3.5 Regional Groundwater Management Planning

The MCWRA has prepared a basin-wide plan, known as the Salinas Valley Water Project (SVWP) to address water supply issues of the Salinas Groundwater Basin. The Plan's objectives are:

- Stop seawater intrusion
- Manage nitrate contamination in groundwater
- Provide adequate water supplies to meet current and future (year 2030) needs, and
- Hydrologically balance the groundwater basin in the Salinas Valley

The Plan anticipates that current demands upon the basin will decline by about 20,000 acre feet annually by 2030 due to urban and agricultural conservation efforts, conversion of agricultural lands and some crop shifting. This overall decline is expected to occur despite a near doubling of the population served from the Salinas Groundwater Basin from 188,949 in 1995 to 355,829 in 2030, which will result in a growth in urban demands of about 40,000 acre feet annually. Additional water to balance recharge with withdrawal in the Basin will be provided through additional capture of Salinas River flows otherwise lost to the Ocean via an in-stream diversion, additional recycled water from the Monterey County Recycling Projects and modification of the spillway at Nacimiento reservoir, which will allow re-operation of this reservoir and San Antonio reservoir producing additional system yield. In total, by 2030 an additional yield of 37,000 acre-feet per year is expected.

While over the long term, the SVWP should achieve overall balance in the Salinas Groundwater Basin arresting seawater intrusion, localized seawater intrusion may remain a problem if localized withdrawals are not managed in concert with localized recharge behavior of the Basin at its coastal margins.

3.6 Groundwater Legal Entitlement

The MCWRA holds the appropriative rights to waters impounded and released from the Nacimiento and San Antonio Reservoirs to recharge the Basin. These waters provide much of the recharge for the Basin. Under the agreements discussed in Section 3.3, MCWRA has legally committed 11,040 acre feet per year of MCWRA's appropriative rights to use within the MCWD service areas. Annexation of the District's service area within the zone of benefit for water from the Nacimiento and San Antonio Reservoirs owned by the Monterey County Water Resources Agency gives the District the right to use such water for the benefit of the annexed lands.

In addition, the District has the appropriative right common to public utilities and municipalities to use "surplus" water in excess of the needs of overlying landowners who pump from the basin, and to establish prescriptive rights (*See Los Angeles v. San Fernando (1975) 14 Cal 3^d. 199, 294*). (*See also California Water, p.51*). The District's appropriative rights to water, together with the District's contractual rights to water, should enable the District to reliably supply water for the projected demand within the District's service area over the next 20 years.

4.0 Water Augmentation

As described in the UWMP, the District's water supply plans include utilizing recycled water, desalination or other new supplies to meet a portion of its future demands. Over the period from FY 03 to FY 08, the District's Capital Improvement Program anticipates an expenditure of about \$27 million to develop additional water supplies, supplementing current District sources. If recycled water is produced, the District will require the installation of recycled water delivery piping for all recreational and common irrigated open space areas within the development. No recycled water service is available for the Marina Heights

development at this time. If recycled water becomes available, then it could be used for non-potable uses for the development.

5.0 Water Conservation

Water conservation and the District's efforts to implement the Best Management Practices for Urban Water Conservation are discussed in the UWMP. Conservation effects on demands are built into the demand forecasts for the District and as such are not considered a separate component of supply.

The Marina Heights project will be required to comply with current plumbing code requirements calling for low-flow plumbing fixtures reducing indoor water consumption. Reduced lots sizes for all but the estate lot residential properties will also tend to minimize outdoor water use compared to larger lots sizes.

6.0 Water Supply Sufficiency Analysis

The District's current groundwater wells have sufficient production capacity to meet the needs of the Marina Heights project. To meet the full build out of the District as described in the UWMP, the District is currently planning additional water supply capacity. Such facilities will be described in the District's master planning process. The project's demands are consistent as a component of FORA demands within an overall water balance prescribed for the Salinas Basin, and FORA allocation criteria can be met for this specific development. However, there are longstanding concerns that localized withdrawals will, over the long term, exceed the localized capacity of the groundwater basin and lead to further seawater intrusion and loss of potable supply at the District's wells (UWMP p.2-9). Due to recent studies and an enhanced understanding of the mechanisms at work in the groundwater basin, there is increased awareness that increased pumping in the Marina area resulting from new development such as proposed by the project development will exacerbate the continued seawater intrusion and speed the rate of water quality degradation.

The Marina Coast Water District and all the jurisdictions represented under FORA have recognized the need to invest in the District's water supply system and the inevitable need to respond to seawater intrusion. Accordingly, the District's current Capital Improvement Program includes development of new water supply wells away from the seawater intrusion front, with construction of well 33 in FY 04, and rehabilitation of wells 31 and 29 in FY 07- 08. A new monitoring well in the deep aquifers is also being constructed this coming year. Plans are also underway to develop a water augmentation supply for the Fort Ord Community Service Area. In FY 03 \$700,000 was budgeted in planning for this augmentation, and a capital fund from FORA in the amount of \$19 million is accumulating and will be available to support the selected project. The District also anticipates a \$10 million capital project for additional supply development beyond 2015.

The District will continue to monitor and develop better information on the rate of seawater intrusion. This information will feed back to further planning and capital programming in order to assure supply reliability is not outstripped by growing demands. This may require additional investment in the water system not already under development or planning. Provided this monitoring is continued and planning and investment proceeds to develop new supplies ahead of any potential loss of existing groundwater wells, a reliable supply can be maintained for the Marina Heights development as well as the District as a whole.

7.0 Availability of Water Treatment and Delivery System Capacity

The District's current plans for upgrading the Ord Community well and transmission network accommodate the water capacity and supply needs for the Marina Heights development. On-site distribution systems will be designed to accommodate necessary demand and fire flows for the project in accordance with District design standards. As the supply is groundwater, no treatment other than chlorination for maintenance of system disinfection is required.

8.0 Regulatory Permits Necessary for Supply Delivery

The District's local supplies are maintained under a public water supply permit from the State Department of Health Services. The District is exempt from local building codes with respect to construction of water treatment and delivery facilities. However, the District does have to comply with State Fish and Game and U.S. Army Corps of Engineer requirements where construction will require stream bed alteration agreements or placement of fill materials in waters of the United States, respectively. No such permits are currently necessary but could become so depending upon projects necessary to assure reliable supplies as discussed in Section 6.0.

9.0 Effect on Agricultural and Industrial Users Not Supplied by the Marina Coast Water District but Reliant on the Same Sources

Agricultural users in the Salinas Valley generally rely on the same basin-wide supply from the Salinas Valley Groundwater Basin. These uses are taken into account in the basin planning of the Monterey County Water Resources Agency as part of developing a water balance for the Basin. As these uses are largely inland of the District, additional demands in the Marina area are not expected to affect them.

10.0 Summary Water Supply Sufficiency Determination

Pursuant to Section 10910 (h) of the California Water Code, and based on the foregoing analysis, the District has determined that its water supplies are currently sufficient to meet the projected water demands associated with the proposed project, in addition to other planned demands expected by the District throughout the build-out of developable land within its boundaries as described in the District's Urban Water Management Plan.

Pursuant to California Government Code Section 66473.7, the District has determined based on the foregoing analysis that it has a sufficient water supply available to serve the proposed development's needs, in addition to existing and planned future uses as anticipated in its Urban Water Management Plan during normal, single-dry and multiple dry years within a twenty-year projection.

Additional planning, financing and development of supplies secure from seawater intrusion will be developed as necessary to assure reliable supplies for the Marina Heights project in conjunction with current users as may be dictated by changed conditions.

11.0 References

Association of California Water Agencies, Water Supply and Development A Users Guide to California Statutes Including AB 221 (Kuehl) & SB 610 Costa, 2002.

City of Marina, Table 1-A Corrected 12-10-03 2015 Water Demand Projections with Inclusion of Marina Heights, Cypress Knolls, and University Villages Projects as Recommended in 11-03 Staff Report (Option 2) With Modifications Suggested by City Council on 11-03-03 and Applying Water Conservation Use Factors- 0.18-0.20-0.25 AFY Per Residential Unit, December 10, 2003

Littleworth, Arthur L. and Garner, Eric L., California Water, 1996

Marina Coast Water District, Deep Aquifer Investigative Study, Water Resources & Information Management Engineering, Inc. May, 2003.

Marina Coast Water District, 2001 Urban Water Management Plan, December 5, 2001

Marina Coast Water District, Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands (1996), document recorded in the Office of the Monterey County Recorder on August 7, 1996, at Reel 3404 Page 749

Marina Coast Water District, Memorandum of Agreement Between the United States of America and the Monterey County Water Resources Agency, Monterey County Agreement No. A-0604, September 21, 1993

Marina Coast Water District, Assignment of Easements on Former Fort Ord and Ord Military Community, County of Monterey, and Quitclaim Deed for Water and Waste Water Systems, Monterey County Recorder's document No. 2001090793, Re-recorded 11-7-2001 as Document No. 2001094583 to correct Exhibit C

Marina Coast Water District, Water/Wastewater Facilities Agreement between the Fort Ord Reuse Authority and Marina Coast Water District, March 13, 1998

Monterey County Water Resources Agency, Salinas Valley Water Project EIR, 1998